ORDER NO. HAD8705141C0
A2

Service Manual

Cassette Deck

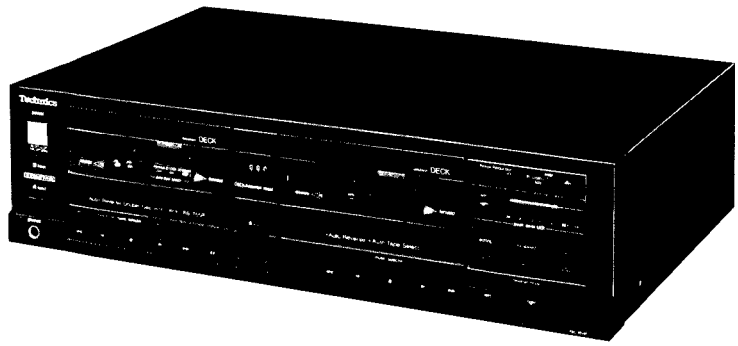
dbx** /Dolby B-C NR, Auto-Reverse Double Cassette Deck

RS-T55R

Color

(K)...Black Type
(S)...Silver Type

DOLBY B•C NR*



Color	Areas
(K)	[M].....U.S.A.
(K) (S)	[MC].....Canada.
(K) (S)	[E].....All European areas except United Kingdom.
(K) (S)	[EK].....United Kingdom.
(K) (S)	[EG].....F.R. Germany.
(K) (S)	[EH].....Holland.
(K) (S)	[XA].....Asia, Latin America, Middle Near East and Africa.
(K) (S)	[XL].....Australia.
(K) (S)	[XB].....Saudi Arabia.
(K)	[PA].....Far East PX.
(K)	[PE].....European Military.

SPECIFICATIONS

Deck system Stereo cassette deck
Track system 4-track, 2-channel
Heads
(DECK A)REC/PLAY Solid Permaloy head
Erasing Double-gap ferrite head
(DECK B)PLAY Solid Permaloy head
Motors
(DECK A) Capstan/reel table drive
2 speed electronically controlled DC motor
(DECK B) Capstan/reel table drive
2 speed electronically controlled DC motor
Recording system AC bias
Bias frequency 77 kHz
Erasing system AC erase
Tape speed 4.8 cm/sec. (1-7/8 ips)
Frequency response (w/o N.R.)
METAL 20 Hz~18 kHz
30 Hz~17 kHz (DIN)
CrO_2 20 Hz~17 kHz
30 Hz~16 kHz (DIN)
NORMAL 20 Hz~16 kHz
30 Hz~15 kHz (DIN)
Dynamic Range (with dbx on) 110 dB (1 kHz)
Max. Input level improvement (with dbx on) 10 dB
S/N (signal level = max recording level, CrO_2 type tape)
dbx on 92 dB (A weighted)
Dolby C NR on 74 dB (CCIR)
Dolby B NR on 66 dB (CCIR)
NR off 56 dB (A weighted)

Wow and flutter 0.07% (WRMS) [others]
0.1% (WRMS) [XL, XA, XB]
±0.2% (DIN)
Fast Forward and Rewind Time
Approx. 95 seconds with C-60 cassette tape
Input sensitivity and impedance
LINE 60 mV/47 kΩ
Output voltage and impedance
LINE 400 mV/3 kΩ
HEADPHONES 80 mV

■ GENERAL

Power consumption 21W
Power supply
For U.S.A. and Canada AC 60 Hz, 120V
For United Kingdom and Australia AC 50 Hz/60 Hz, 240V
For continental Europe AC 50 Hz/60 Hz, 220V
For others AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D) 430 × 118.6 × 273.5 mm
(16-15/16" × 4-11/16" × 10-25/32")
Weight 5.2 kg (11.5 lb.)

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

** The term dbx is a registered trademark of dbx Inc.

Technics

Matsushita Services Company
50 Meadowland Parkway,
Secaucus, New Jersey 07094

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

Panasonic Hawaii, Inc.
91-238, Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

Matsushita Electric of Canada Limited
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
6th Floor, world Trade Center Bldg.,
No. 4-1, Hamamatsu-cho 2-Chome,
Minato-ku, Tokyo 105, Japan

■ CONTENTS

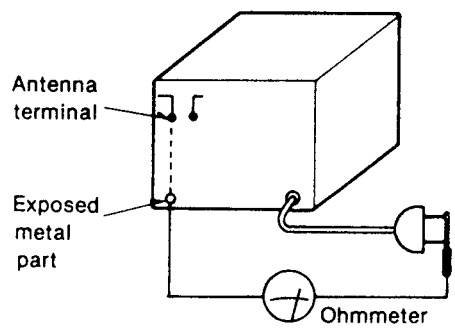
■ SAFETY PRECAUTION (This "safety precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

• INSULATION RESISTANCE TEST

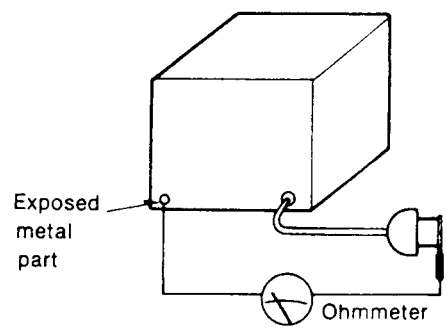
1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)

Resistance = 3MΩ—5.2MΩ



(Fig. B)

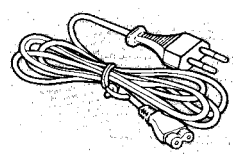
Resistance = Approx. ∞

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer..

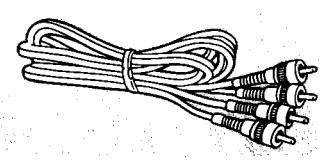
■ ACCESSORIES

• AC power supply cord 1

SFDAC05G02	[EK]
SFDAC05E03	[E, EH, EG]
SJA183	[XB]
SJA172	[MC]
SJA173	[XL]
SJA172-1	[M]
SJA168-1	[XA]



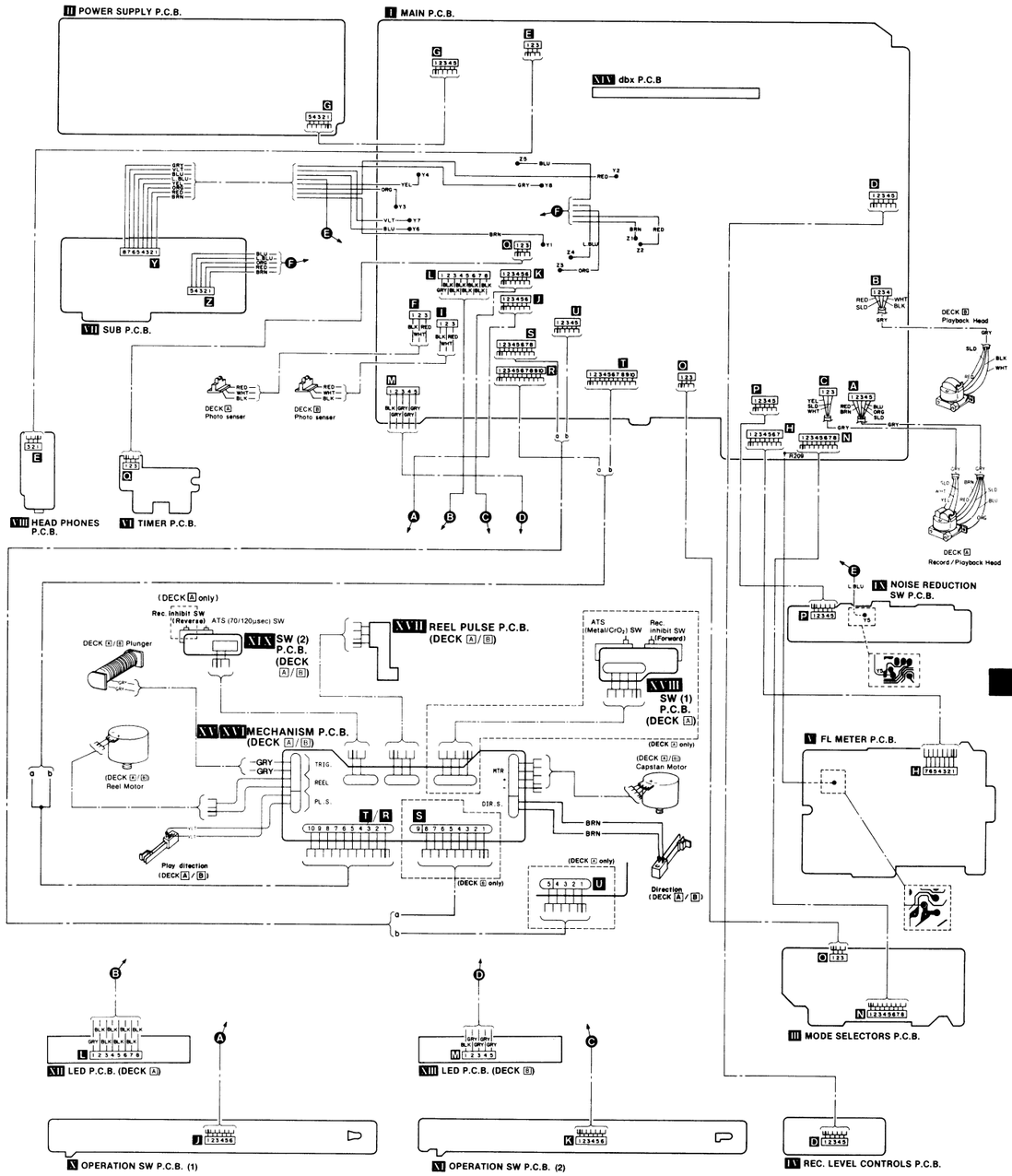
• Stereo connection cables 2
(SJP2264)



Change of Ref. No. OLD → NEW		Parts No.	Part Name & Description	Remarks
RESISTORS				
R610	**R610 [M, MC, E, EG] [EH, XA, XB, PA, PE]**	ERDS1FJ470	Carbon, 47Ω, 1/2W	Correction
R611	**R611 [M, MC, E, EG] [EH, XA, XB, PA, PE]**	ERDS1FJ470	Carbon, 47Ω, 1/2W	Correction
R615 ⚠	**R615 ⚠ [M, MC, E, EG] [EH, XA, XB, PA, PE]**	ERDS1FJ2R2	Carbon, 2.2Ω, 1/2W	Correction
R616	**R616 [M, MC, E, EG] [EH, XA, XB, PA, PE]**	ERDS1FJ4R7	Carbon, 4.7Ω, 1/2W	Correction
CAPACITORS				
C81, C82	**C81, C82 [EG]**	ECBT1H102KB5	Ceramic, 1000pF, 50V	Correction
C83	**C83 [EG]**	ECKD1H223PF	Ceramic, 0.022μF, 50V	Correction
INTEGRATED CIRCUIT				
IC401	**IC901**	LC6554H-3426	INTEGRATED CIRCUIT	Correction
TRANSISTOR				
Q407	**Q907**	2SC3311A-Q	TRANSISTOR	Correction
I.C. PROTECTORS				
ICP603	**ICP603 [EK, XL]**	SRUN10	I.C. PROTECTOR	Correction
ICP601, ICP602	**ICP601, ICP602 [EK, XL]**	SRUN15	I.C. PROTECTOR	Correction
TRANSFORMER				
T601 ⚠ [XA, XB, PA]	**T601 ⚠ [XA, XB, PA, PE]**	SLT5V21	POWER TRANSFORMER	Correction
SWITCH				
S602 ⚠ [XA, XB, PA]	**S602 ⚠ [XA, XB, PA, PE]**	SSR187-1	SW, VOLTAGE SELECT	Correction

■ WIRING CONNECTION DIAGRAM

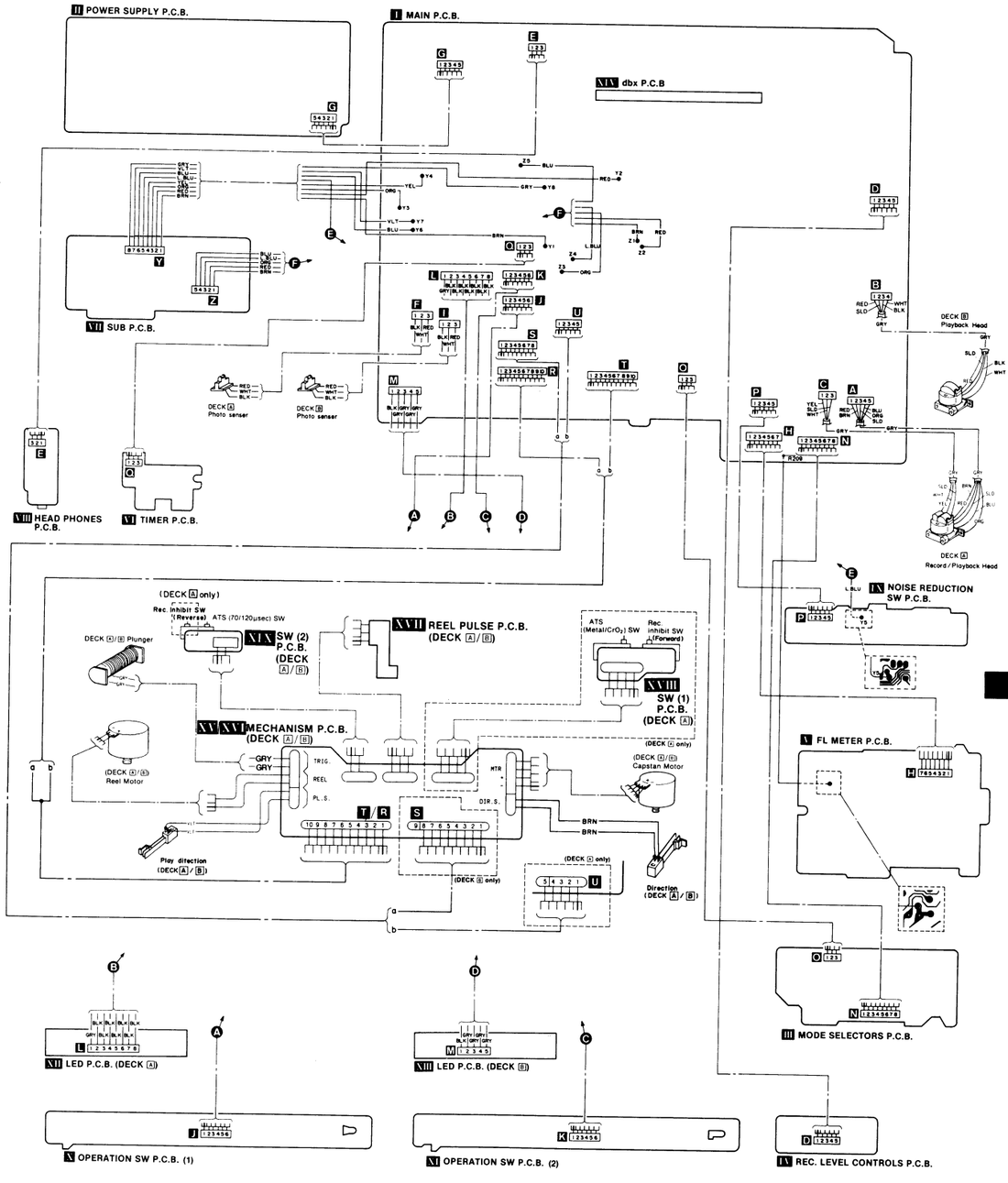
(OLD)



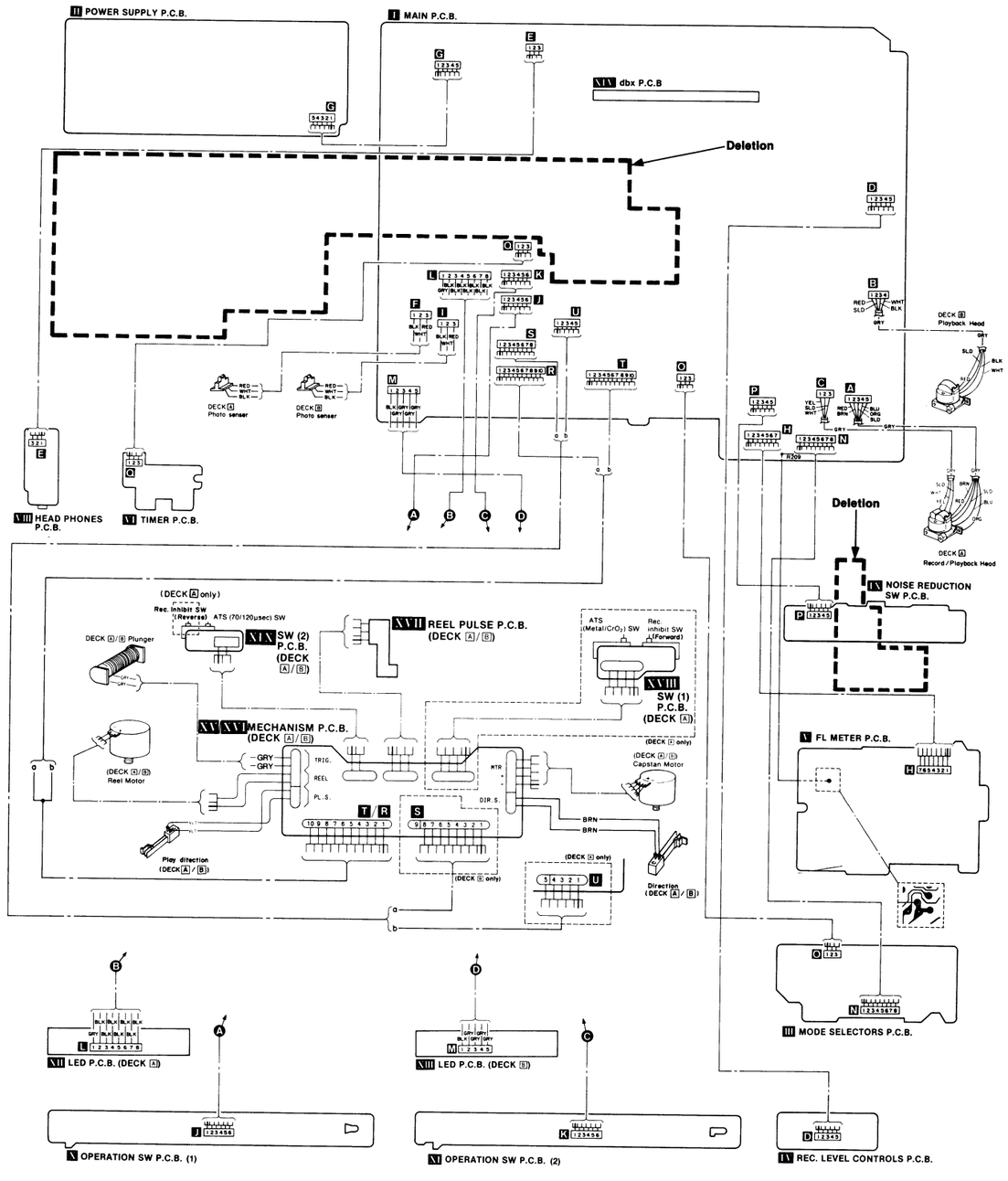
	Remarks
	Correction
	Correction
	Correction
	Correction
	Correction
	Correction
	Correction
	Correction
	Correction
	Correction

■ WIRING CONNECTION DIAGRAM

(OLD)



(NEW)



RS-T55R RS-T55R

■ SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

* This schematic diagram applies to units having serial number suffixes "C" or later.

Notes:

- **S601** : Power switch in "**on**" position.
- **S602** : Voltage selector in "**240V**" position ([XA, XB, PA, PE] areas).
- **S701** : DECK [A] Rew./F.F. switch in "**off**" position.
- **S702** : DECK [B] Rew./F.F. switch in "**off**" position.
- **S703** : DECK [A] F.F./Rew. switch in "**off**" position.
- **S704** : DECK [B] F.F./Rew. switch in "**off**" position.
- **S705** : DECK [A] Play (REV) switch in "**off**" position.
- **S706** : DECK [B] Play (REV) switch in "**off**" position.
- **S707** : DECK [A] Play (FWD) switch in "**off**" position.
- **S708** : DECK [B] Play (FWD) switch in "**off**" position.
- **S709** : DECK [A] Stop switch in "**off**" position.
- **S710** : DECK [B] Stop switch in "**off**" position.
- **S711** : DECK [A] Pause switch in "**off**" position.
- **S712** : Syncro-recording-start switch in "**off**" position.
- **S713** : DECK [A] Auto rec. mute switch in "**off**" position.
- **S715** : DECK [A] Rec. switch in "**off**" position.
- **S721** : NR off switch in "**off**" position.
- **S722** : NR dbx switch in "**off**" position.
- **S723** : Dolby C NR switch in "**off**" position.
- **S724** : Dolby B NR switch in "**off**" position.
- **S731** : Editing-tape-speed selector in "**off (X1)**" position.
- **S732** : Edit-recording switch in "**off**" position.
- **S741** : Repeat (⇆) switch in "**off**" position.
- **S742** : Reverse (⇄) switch in "**off**" position.
- **S743** : One way (→) switch in "**off**" position.
- **S744** : Series (⇉) switch in "**off**" position.

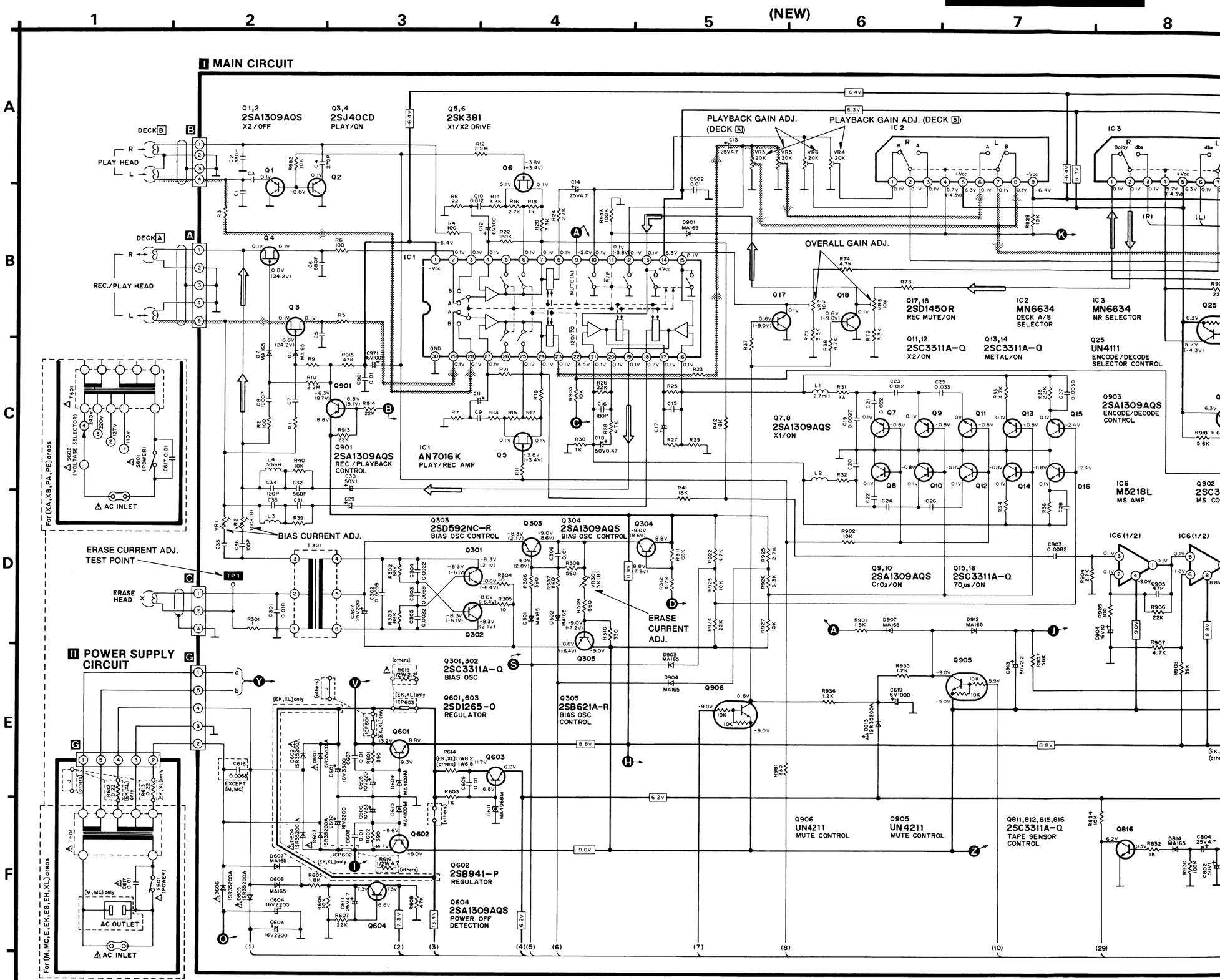
  } Reverse mode selectors

- **S750** : Timer stand-by switch in "**off**" position.
- **S901** : DECK [A] ATS (Metal/CrO_2) switch in "**off**" position.
- **S902** : DECK [A] ATS (70/120μs) switch in "**off**" position.
- **S903** : DECK [A] Rec. inhibit (REV) switch in "**off**" position.
- **S904** : DECK [A] Rec. inhibit (FWD) switch in "**off**" position.
- **S905** : DECK [A] Play ditection switch in "**off**" position.
- **S906** : DECK [A] Direction switch in "**off**" position.
- **S907** : DECK [B] ATS (70/120μs) switch in "**off**" position.
- **S908** : DECK [B] Play ditection switch in "**off**" position.
- **S909** : DECK [B] Direction switch in "**off**" position.
- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.
  1K=1,000 (Ω), 1M=1,000k (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
  ( )..... Voltage values at record mode.
  For measurement use EVM.
- Important safety notice
  Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- (—□—) indicates B (bias).
- (▨) indicates the flow of the playback signal.
- (⟹) indicates the flow of the record signal.

∗ Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

∗ Cover the parts boxes made of plastics with aluminum foil.
∗ Ground the soldering iron.
∗ Put a conductive mat on the work table.
∗ Do not touch the legs of IC or LSI with the fingers directly.



2 3 4 5 (NEW) 6 7 8 9 10 11 12

MAIN CIRCUIT

Q1,2 2SA1309AQS X2/OFF

Q3,4 2SJ40CD PLAY/ON

Q5,6 2SK381 X1/X2 DRIVE

PLAYBACK GAIN ADJ. (DECK A)

PLAYBACK GAIN ADJ. (DECK B)

IC2

IC3

OVERALL GAIN ADJ.

IC1 AN7016K PLAY/REC AMP

Q901 2SA1309AQS REC./PLAYBACK CONTROL

Q17,18 2SD1450R REC MUTE/ON

IC2 MN6634 DECK A/B SELECTOR

IC3 MN6634 NR SELECTOR

Q11,12 2SC3311A-Q X2/ON

Q13,14 2SC3311A-Q METAL/ON

Q25 UN4111 ENCODE/DECODE SELECTOR CONTROL

Q903 2SA1309AQS ENCODE/DECODE CONTROL

Q7,8 2SA1309AQS X1/ON

Q9,10 2SA1309AQS CrO2/ON

Q15,16 2SC3311A-Q 70μs/ON

IC6 M5218L MS AMP

Q902 2SC3311A-Q MS CONTROL

IC401,402 TEA0665 DOLBY NR

Q401~404 2SA1309AQS DOLBY X2/ON

IC402

BIAS CURRENT ADJ.

Q303 2SD592NC-R BIAS OSC CONTROL

Q304 2SA1309AQS BIAS OSC CONTROL

Q301 Q302

ERASE CURRENT ADJ.

Q301,302 2SC3311A-Q BIAS OSC

Q305 2SB621A-R BIAS OSC CONTROL

Q601,603 2SD1265-0 REGULATOR

Q602 2SB941-P REGULATOR

Q604 2SA1309AQS POWER OFF DETECTION

Q906 UN4211 MUTE CONTROL

Q905 UN4211 MUTE CONTROL

Q811,812,815,816 2SC3311A-Q TAPE SENSOR CONTROL

Q816

Q811 Q812 Q815

VIII HEAD PHONES CIRCUIT

IX REC. LEVEL CONTROLS CIRCUIT

XIV dbx CIRCUIT

dbx TIMING ADJ.
TEST POINT

dbx TIMING ADJ.

FLUORESCENT METER LEVEL ADJ.

REC. LEVEL CONTROLS

TAPE SPEED ADJ.
TEST POINT

DECK A
TAPE SPEED ADJ. (X1)

DECK A
TAPE SPEED ADJ. (X2)

IC4
MN6634
NR SELECTOR

IC5
M5218L
HEADPHONE AMP.

Q21,22
2SD1450R
LINE MUTE (MUTE ON)

IC501
AN6294NK
dbx AMP.

IC801
LB1648
REEL MOTOR CONTROL

Q801
2SA885Q
PLUNGER CONTROL

Q803
2SB621A-R
MOTOR CONTROL (DECK A)

Q908
2SA1309AQS
REMOTE CONTROL

Q19,20
2SA1253-S
LINE MUTE (REC/OFF)

IC901
LC6554H-3426
MICRO-COMPUTER

Q907
2SC3311A-Q
RESET

Q809
UN4214
MOTOR CONTROL (DECK A)

Q805,806
UN4211
PLUNGER CONTROL

Q807,808
2SC1846-R
PLUNGER CONTROL

Q802
2SA885Q
PLUNGER CONTROL

Q804
2SB621A-R
MOTOR CONTROL (DECK B)

Q810
UN4214
MOTOR CONTROL (DECK B)

Q813
2SK381
TAPE SPEED CONTROL

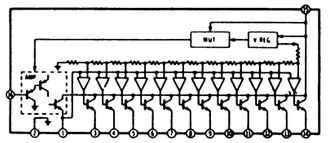
XV MECHANISM CIRCUIT (DECK A)

XVI MECHANISM CIR

(NEW) 22 23 24 25 26 27 28 29 30 31

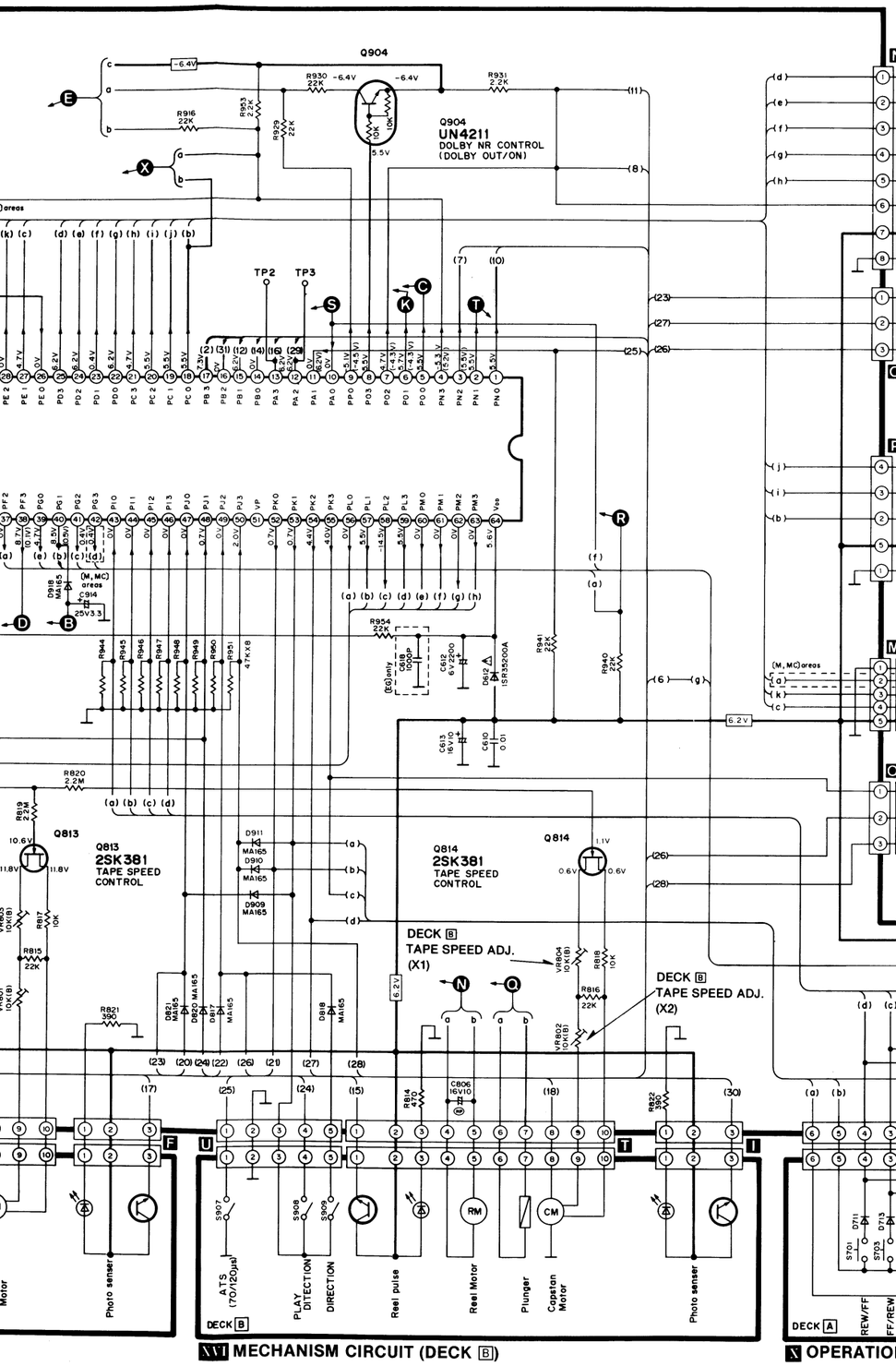
■ EQUIVALENT CIRCUIT

IC201, 202: BA6146

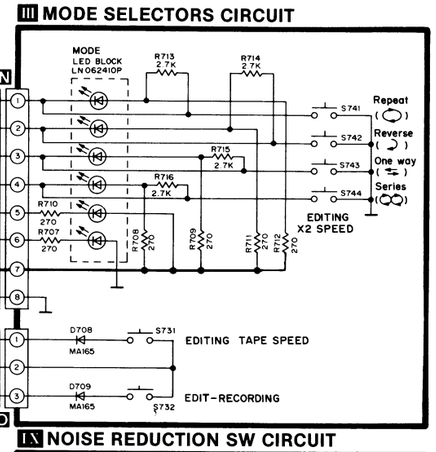


• **SPECIFICATIONS** ＊Input level control...MAX

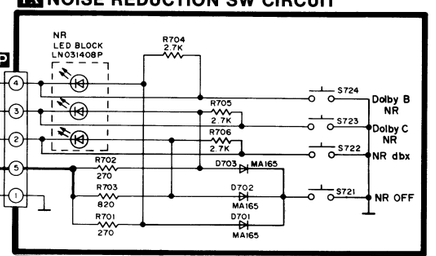
Playback S/N ratio ＊Test tape...QZZCFM	Greater than 45dB
Overall distortion ＊Test tape ...QZZCRA for Normal ...QZZCRX for CrO_2 ...QZZCRZ for Metal	Normal... Less than 3.5% CrO_2, Metal... Less than 4%
Overall S/N ratio ＊Test tape...QZZCRA	Greater than 43dB (without NAB filter)



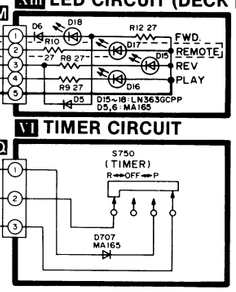
III MODE SELECTORS CIRCUIT



IX NOISE REDUCTION SW CIRCUIT

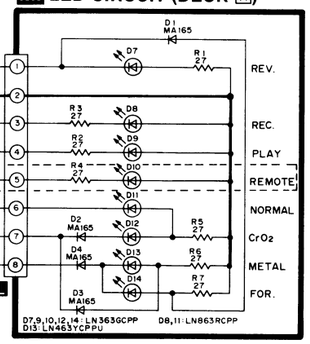


XIII LED CIRCUIT (DECK B)

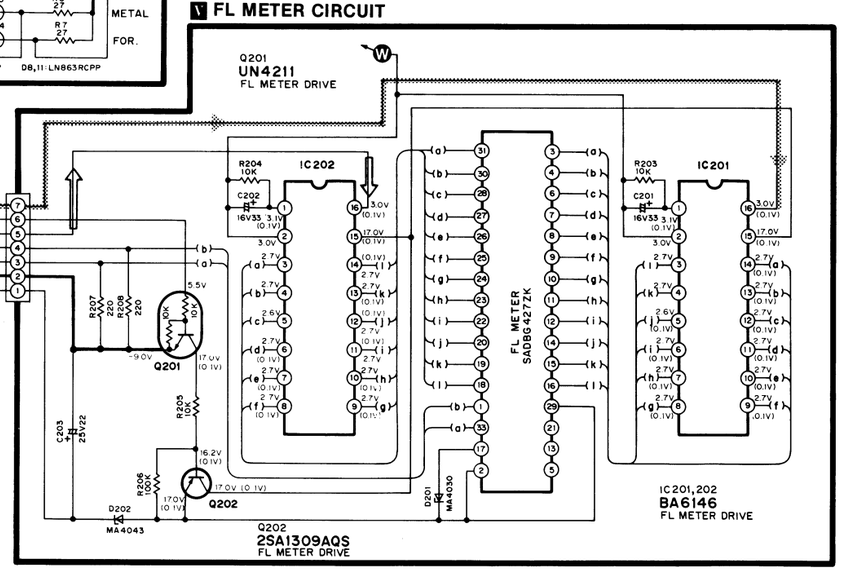


VI TIMER CIRCUIT

XII LED CIRCUIT (DECK A)



V FL METER CIRCUIT



XVI MECHANISM CIRCUIT (DECK B)

X OPERATION SW CIRCUIT (1)

XI OPERATION SW CIRCUIT (2)

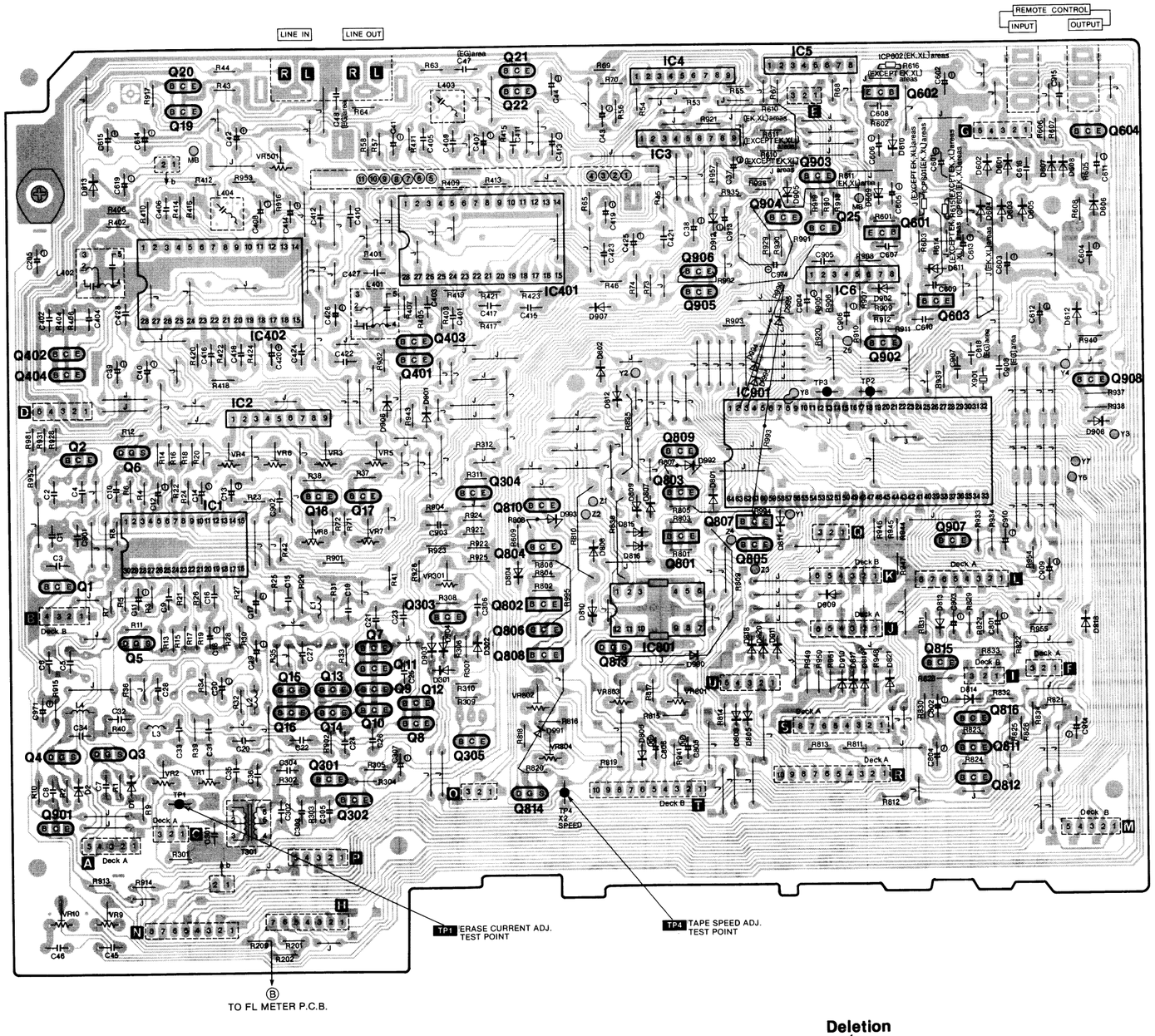
■ PRINTED CIRCUIT BOARDS

(OLD)

14 15 16 17 18 19 20

A B C D E F G

I MAIN P.C.B.



Deletion

※Caution!
The microcomputer for system control of this unit (Ref No. IC901) has been changed during production.

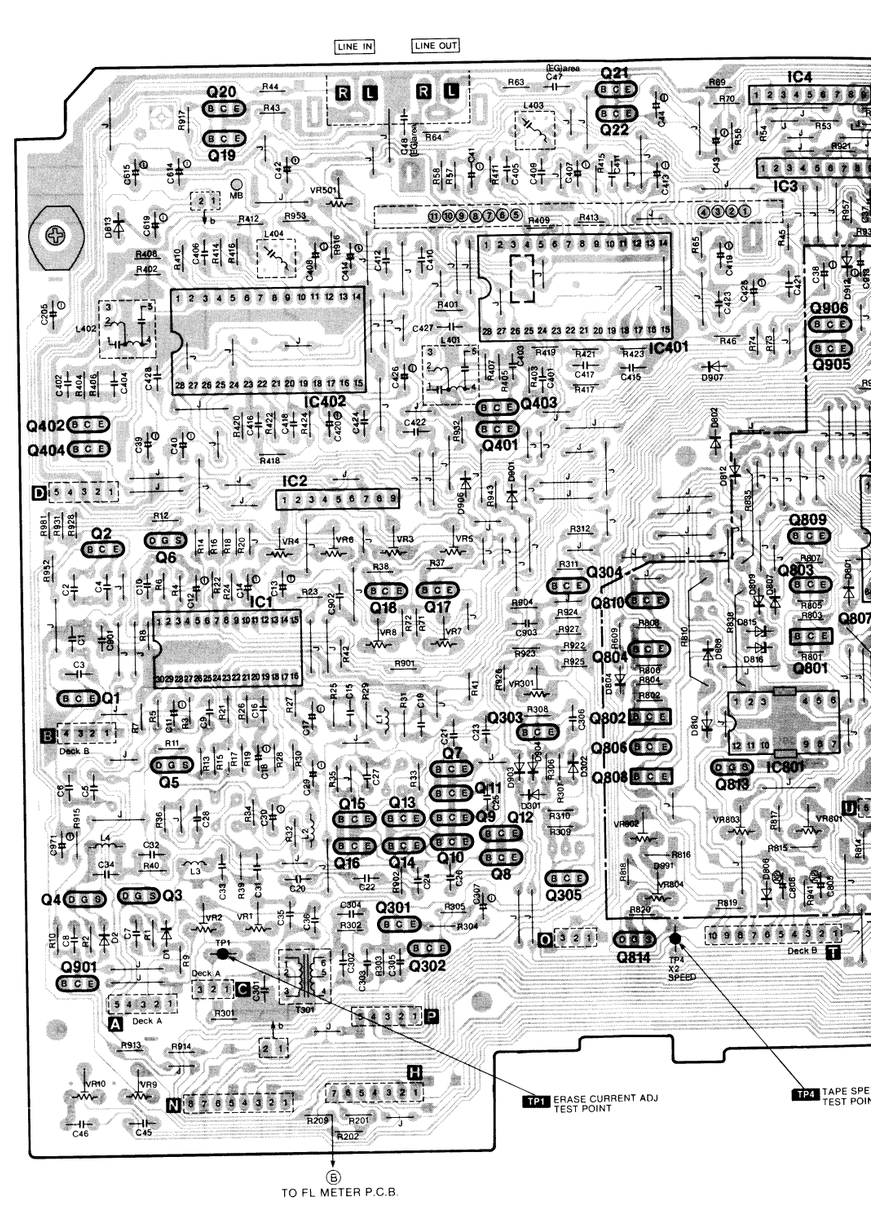
(OLD) LC6554H-3355 ➡ (NEW) LC6554H-3426
New type is supplied as the replacement part.

(NEW)

14 15 16 17

A B C D E F G

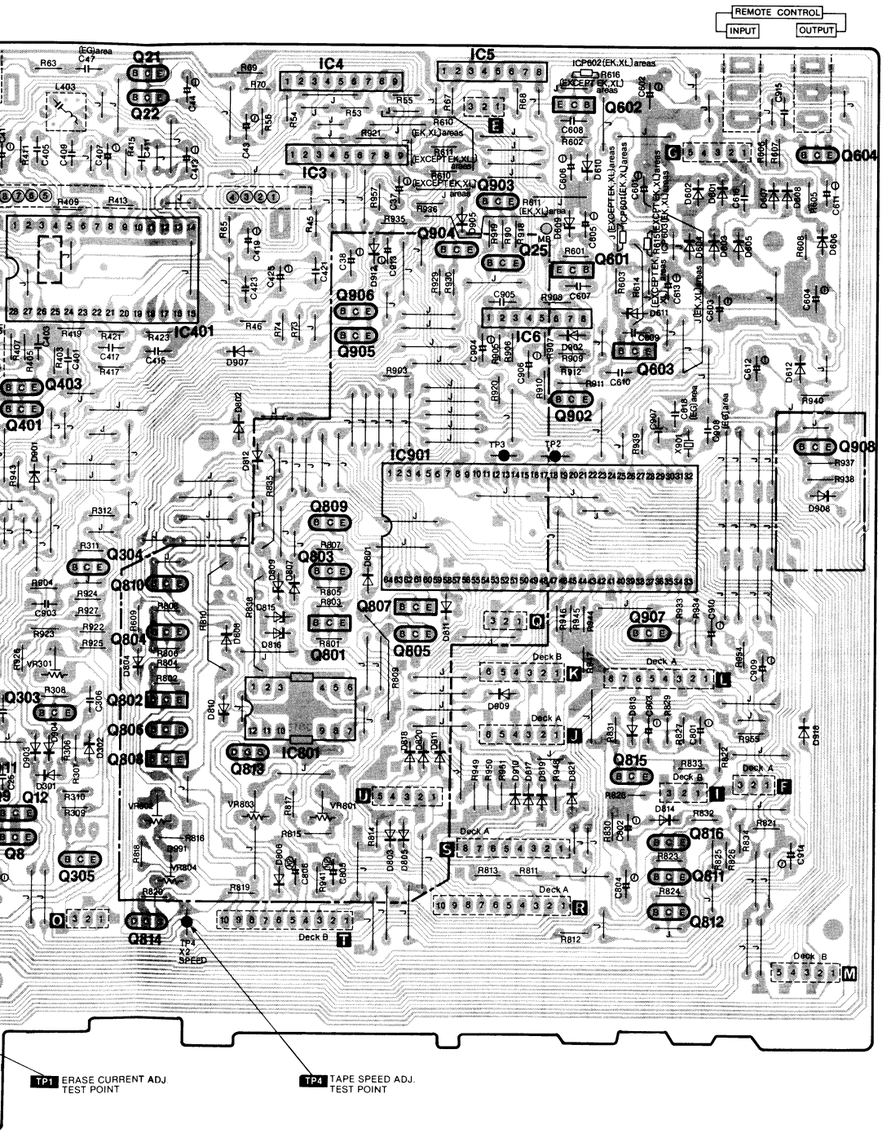
I MAIN P.C.B. : Changed parts



(NEW)

16 17 18 19 20

ed parts



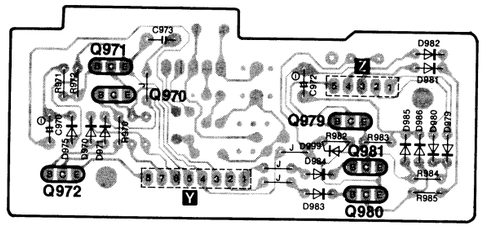
(OLD)

7 8

A

B

VII SUB P.C.B.



(NEW)

7 8

A

B

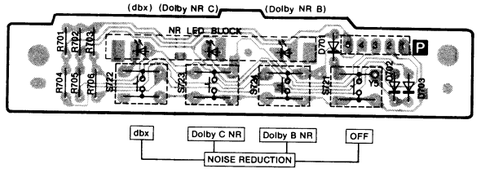
Deletion

(OLD)

1 2 3

D

IX NOISE REDUCTION SW P.C.B.

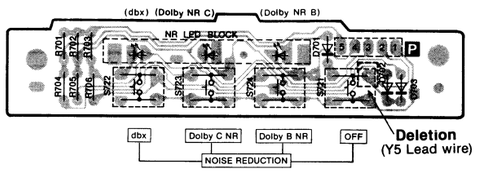


(NEW)

1 2 3

D

IX NOISE REDUCTION SW P.C.B.



Printed in Japan
H871111850 MY

■ RESISTORS & CAPACITORS

Notes: * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

Numbering System of Resistor

Example

ERD	25	F	J	102
Type	Wattage	Shape	Tolerance	Value

ERX	2	AN	J	471
Type	Wattage	Shape	Tolerance	Value 47x10¹ (ohm)

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity

ECEA	50	M	330
Type	Voltage	Peculiarity	Value (33x10⁰ microfarad)

Resistor Type	Wattage	Tolerance
ERD : Carbon ERG : Metal Oxide ERX : Metal Film ERQ : Fuse Type Metal ERD□ L : Carbon (chip) ERO□ K : Metal Film (chip) ERC : Solid	10 : 1/8W 12 : 1/2W 25 : 1/4W 1A : 1W 18 : 1/8W S2 : 1/4W S1 : 1/2W 2F : 1/4W 50 : 1/2W 2A : 2W	J : ±5% F : ±1% G : ±2% K : ±10%

Capacitor Type	Voltage	Tolerance
ECE : Electrolytic ECCD : Ceramic ECKD : Ceramic ECQM : Polyester ECQP : Polyproylene ECG : Ceramic ECEA□□□N: Non Polar Electrolytic QCU□ : Ceramic (Chip Type) ECUX : Ceramic (Chip Type) ECF : Semiconductor EECW : Liquid electrolyte double layer capcitor	0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1H : 50V 1V : 35V 50 : 50V 05 : 50V 2H : 500V 2A : 100V 1 : 100V KC : 400V AC KC : 125VAC (UL) 1J : 63V	C : ±0.25pF J : ±5% K : ±10% Z : +80% −20% P : +100% −0% M : ±20% D : ±0.5pF G : ±2%

Ref. No.	Part No.	Part Code
RESISTORS		
R1, R2	ERDS2TJ101	001 152 2421 0
R3, R4	ERDS2TJ101	001 152 2421 0
R5, R6	ERDS2TJ101	001 152 2421 0
R7, R8	ERDS2TJ820	001 152 2453 2
R9, R10	ERDS2TJ225	001 152 3149 3
R11, R12	ERDS2TJ225	001 152 3149 3
R13, R14	ERDS2TJ332	001 152 2357 1
R15, R16	ERDS2TJ272	001 152 2354 4
R17, R18	ERDS2TJ102	001 152 2346 4
R19, R20	ERDS2TJ332	001 152 2357 1
R21, R22	ERDS2TJ184	001 152 2588 8
R23, R24	ERDS2TJ471	001 152 2361 5
R25, R26	ERDS2TJ223	001 152 2432 7
R27, R28	ERDS2TJ472	001 152 2362 4
R29, R30	ERDS2TJ102	001 152 2346 4
R31, R32	ERDS2TJ330	001 152 2355 3
R33, R34	ERDS2TJ472	001 152 2362 4
R35, R36	ERDS2TJ222	001 152 2353 5
R37, R38	ERDS2TJ472	001 152 2362 4
R39, R40	ERDS2TJ103	001 152 2347 3
R41, R42	ERDS2TJ183	001 152 2429 2
R43, R44	ERDS2TJ223	001 152 2432 7
R45, R46	ERDS2TJ562	001 152 2445 2
R53, R54	ERDS2TJ122	001 152 2423 8
R55, R56	ERDS2TJ472	001 152 2362 4
R57, R58	ERDS2TJ113	001 152 3145 7
R63, R64	ERDS2TJ182	001 152 2352 6
R65	ERDS2TJ272	001 152 2354 4
R67, R68	ERDS2TJ330	001 152 2355 3
R69, R70	ERDS2TJ104	001 152 2348 2
R71, R72	ERDS2TJ332	001 152 2357 1
R73, R74	ERDS2TJ472	001 152 2362 4
R90	ERDS2TJ223	001 152 2432 7
R201, R202	ERDS2TJ103	001 152 2347 3
R203, R204	ERDS2TJ103	001 152 2347 3
R205	ERDS2TJ103	001 152 2347 3
R206	ERDS2TJ104	001 152 2348 2
R207, R208	ERDS2TJ221	001 152 2431 8
R209	ERDS2TJ391	001 152 2360 6
R301	ERDS2TJ1R0	001 152 2419 4
R302, R303	ERDS2TJ683	001 152 2450 5
R304, R305	ERDS2TJ100	001 152 2420 1
R306	ERDS2TJ391	001 152 2360 6
R307	ERDS2TJ471	001 152 2361 5
R308, R309	ERDS2TJ561	001 152 2364 2
R310	ERDS2TJ331	001 152 2356 2
R311	ERDS2TJ683	001 152 2450 5
R312	ERDS2TJ472	001 152 2362 4
R401, R402	ERDS2TJ242	001 152 3150 0
R403, R404	ERDS2TJ684	001 152 2451 4
R405, R406	ERDS2TJ684	001 152 2451 4
R407, R408	ERDS2TJ562	001 152 2445 2
R409, R410	ERDS2TJ332	001 152 2357 1
R411, R412	ERDS2TJ102	001 152 2346 4
R413, R414	ERDS2TJ333	001 152 2358 0
R415, R416	ERDS2TJ823	001 152 2456 9
R417, R418	ERDS2TJ512	001 152 2596 8
R419, R420	ERDS2TJ683	001 152 2450 5
R421, R422	ERDS2TJ222	001 152 2353 5
R423, R424	ERDS2TJ823	001 152 2456 9
R501, R502	ERDS2TJ432	001 152 2827 2
R503, R504	ERDS2TJ622	001 152 3156 4
R505, R506	ERDS2TJ243	001 152 2825 4
R507, R508	ERDS2TJ913	001 152 3708 4
R509, R510	ERDS2TJ472	001 152 2362 4
R511, R512	ERDS2TJ333	001 152 2358 0
R513, R514	ERDS2TJ333	001 152 2358 0
R515, R516	ERDS2TJ682	001 152 2365 1
R517, R518	ERDS2TJ182	001 152 2352 6
R519, R520	ERDS2TJ183	001 152 2429 2
R521	ERDS2TJ102	001 152 2346 4
R523, R524	ERDS2TJ123	001 152 2424 7
R525, R526	ERDS2TJ123	001 152 2424 7
R527, R528	ERDS2TJ112	001 152 3889 4
R529, R530	ERDS2TJ112	001 152 3889 4
R531, R532	ERDS2TJ223	001 152 2432 7
R533	ERDS2TJ103	001 152 2347 3
R601, R602	ERDS2TJ391	001 152 2360 6
R603	ERDS2TJ102	001 152 2346 4
R605	ERDS2TJ182	001 152 2352 6
R606	ERDS2TJ103	001 152 2347 3
R607	ERDS2TJ223	001 152 2432 7
R608	ERDS2TJ473	001 152 2363 3
R609	ERDS2TJ103	001 152 2347 3
R610	ERDS1FJ470	001 152 2632 1
R610 (EK, XL)	ERG2ANJ470	001 151 0165 0
R611	ERDS1FJ470	001 152 2632 1
R611 (EK, XL)	ERG2ANJ470	001 151 0165 0
R612, R613 (EK, XL)	ERQ14LKR22E	001 190 0738 6
R614 (M, MC, E)	ERX1ANJ6R8	001 151 0445 5
R614 (EH, EG, XA) (XB, PA, PE)	ERX1ANJ8R2	001 151 0447 3
R614 (EK, XL)		
R615 ⚠	ERDS1FJ2R2	001 152 2755 1
R616	ERDS1FJ4R7	001 152 2631 2
R701, R702	ERDS2TJ271	001 152 2435 4
R703	ERDS2TJ821	001 152 2454 1
R704, R705	ERDS2TJ272	001 152 2354 4
R706	ERDS2TJ272	001 152 2354 4
R707, R708	ERDS2TJ271	001 152 2435 4
R709, R710	ERDS2TJ271	001 152 2435 4
R711, R712	ERDS2TJ271	001 152 2435 4
R713, R714	ERDS2TJ272	001 152 2354 4
R715, R716	ERDS2TJ272	001 152 2354 4
R801, R802	ERDS2TJ104	001 152 2348 2
R803, R804	ERDS2TJ821	001 152 2454 1
R805, R806	ERDS2TJ104	001 152 2348 2
R807, R808	ERDS2TJ821	001 152 2454 1
R809, R810	ERX2ANJ180	001 151 0133 8
R811, R812	ERDS2TJ392	001 152 2439 0
R813, R814	ERDS2TJ471	001 152 2361 5
R815, R816	ERDS2TJ223	001 152 2432 7
R817, R818	ERDS2TJ103	001 152 2347 3
R819, R820	ERDS2TJ225	001 152 3149 3
R821, R822	ERDS2TJ391	001 152 2360 6
R823, R824	ERDS2TJ223	001 152 2432 7
R825, R826	ERDS2TJ103	001 152 2347 3
R827, R828	ERDS2TJ103	001 152 2347 3
R829, R830	ERDS2TJ104	001 152 2348 2
R831, R832	ERDS2TJ102	001 152 2346 4
R833, R834	ERDS2TJ103	001 152 2347 3
R835, R836	ERG1ANJ390	001 151 0066 2

Ref. No.	Part No.	Part Code
R901	ERDS2TJ821	001 152 2454 1
R902, R903	ERDS2TJ103	001 152 2347 3
R904	ERDS2TJ272	001 152 2354 4
R905	ERDS2TJ101	001 152 2421 0
R906	ERDS2TJ223	001 152 2432 7
R907	ERDS2TJ472	001 152 2362 4
R908	ERDS2TJ393	001 152 2440 7
R909	ERDS2TJ102	001 152 2346 4
R910	ERDS2TJ333	001 152 2358 0
R911	ERDS2TJ473	001 152 2363 3
R912	ERDS2TJ562	001 152 2445 2
R913, R914	ERDS2TJ223	001 152 2432 7
R915	ERDS2TJ473	001 152 2363 3
R916	ERDS2TJ223	001 152 2432 7
R917	ERDS2TJ103	001 152 2347 3
R918	ERDS2TJ562	001 152 2445 2
R919	ERDS2TJ223	001 152 2432 7
R920	ERDS2TJ562	001 152 2445 2
R921	ERDS2TJ223	001 152 2432 7
R922	ERDS2TJ472	001 152 2362 4
R923	ERDS2TJ103	001 152 2347 3
R924	ERDS2TJ223	001 152 2432 7
R925	ERDS2TJ272	001 152 2354 4
R926	ERDS2TJ332	001 152 2357 1
R927, R928	ERDS2TJ103	001 152 2347 3
R929, R930	ERDS2TJ223	001 152 2432 7
R931	ERDS2TJ222	001 152 2353 5
R932	ERDS2TJ272	001 152 2354 4
R933	ERDS2TJ103	001 152 2347 3
R934	ERDS2TJ471	001 152 2361 5
R935, R936	ERDS2TJ122	001 152 2423 8
R937	ERDS2TJ223	001 152 2432 7
R938	ERDS2TJ103	001 152 2347 3
R939, R940	ERDS2TJ223	001 152 2432 7
R941	ERDS2TJ223	001 152 2432 7
R943	ERDS2TJ104	001 152 2348 2
R944, R945	ERDS2TJ473	001 152 2363 3
R946, R947	ERDS2TJ473	001 152 2363 3
R948, R949	ERDS2TJ473	001 152 2363 3
R950, R951	ERDS2TJ473	001 152 2363 3
R952	ERDS2TJ103	001 152 2347 3
R953	ERDS2TJ222	001 152 2353 5
R954, R955	ERDS2TJ223	001 152 2432 7
R957	ERDS2TJ563	001 152 2446 1
R970	ERDS2TJ103	001 152 2347 3
R971	ERDS2TJ272	001 152 2354 4
R972	ERDS2TJ223	001 152 2432 7
R981	ERDS2TJ331	001 152 2356 2
R982	ERDS2TJ473	001 152 2363 3
R983	ERDS2TJ223	001 152 2432 7
R984, R985	ERDS2TJ472	001 152 2362 4
R990	ERDS2TJ223	001 152 2432 7
R991	ERDS2TJ103	001 152 2347 3
R992	ERDS2TJ272	001 152 2354 4
R993	ERDS2TJ101	001 152 2421 0
CAPACITORS		
C1, C2	ECKD1H331KB	001 103 1523 4
C3, C4	ECKD1H271KB	001 103 1515 4
C5, C6	ECKD1H681K	001 103 1580 5
C7, C8 ⚠	ECKD1H122KB	001 103 1459 5
C9, C10	ECQB1H123JZ	001 106 3239 2
C11, C12	ECEA0JU101	001 120 2829 8
C13, C14	ECEA1EK4R7	001 120 0294 5
C15, C16	ECCD1H181K	001 103 0466 0
C17, C18	ECEA1HKR47	001 120 0338 0
C19, C20	ECQB1H272JZ	001 106 3456 5
C21, C22	ECQB1H223JZ	
C23, C24	ECQB1H123JZ	001 106 3239 2
C25, C26	ECQB1H333JZ	001 106 4846 1
C27, C28	ECQB1H392JZ	001 106 3406 5
C29, C30	ECEA1HK010	001 120 0341 5
C31, C32	ECKD1H561KB	001 103 1576 1
C33, C34	ECKD2H121KB	001 103 1635 7
C35, C36	ECCD1H101K	001 103 0341 2
C37, C38	ECEA1CKS100	001 120 2600 7
C39, C40	ECEA1HK010	001 120 0341 5
C41, C42	ECEA1CKS100	001 120 2600 7
C43, C44	ECEA1CKS100	001 120 2600 7
C45, C46	ECFTD104KXL	001 108 0793 3
C47, C48 (EG)	ECKD1H331KB	001 103 1523 4
C81, C82	ECKD1H102KB	001 103 1414 8
C83	ECKD1H223PF	001 103 1510 9
C201, C202	ECEA1CK330	001 120 0226 7
C203	ECEA1EU220	001 120 3128 6
C205	ECEA1AU221	001 120 3131 1
C301	ECQP1183JZ	001 106 1083 2
C302	ECKD1H392KB	001 103 1547 6
C303	ECFR1E682KAY	001 108 1101 7
C304, C305	ECFR1E222KAY	001 108 0942 8
C306	ECKD1H103PF	001 103 1449 7
C307	ECEA1EU221	001 120 2838 7
C401, C402 ⚠	ECKD1H122KB	001 103 1459 5
C403, C404 ⚠	ECKD1H152KB	001 103 1467 5
C405, C406	ECQB1H472JZ	001 106 3380 8
C407, C408	ECEA1CKS100	001 120 2600 7
C409, C410	ECQM1H473JZ	001 106 0810 9
C411, C412	ECQM1H224JZ	001 106 0746 0
C413, C414	ECAG25ER68L	001 120 1109 7
C415, C416	ECQB1H103JZ	001 106 3225 8
C417, C418	ECQB1H472JZ	001 106 3380 8
C419, C420	ECEA1CKS100	001 120 2600 7
C421, C422	ECQM1H473JZ	001 106 0810 9
C423, C424	ECQM1H224JZ	001 106 0746 0
C425, C426	ECAG25ER68L	001 120 1109 7
C427, C428	ECCD1H820K	001 103 0703 6
C501, C502	ECEA1AK220	
C503, C504	ECQB1H153JZ	001 106 2817 4
C505, C506	ECKD1H331KB	001 103 1523 4
C507, C508	ECEA1CKS100	001 120 2600 7
C509, C510	ECEA1AN220S	001 120 2313 1
C511, C512	ECEA1HK010	001 120 0341 5
C513, C514	ECQV1H104JZ	001 106 2571 7
C515, C516	ECQV1H104JZ	001 106 2571 7
C517, C518	ECQB1H332JZ	001 106 3316 6
C519, C520	ECQB1H332JZ	001 106 3316 6
C521, C522	ECKD1H331KB	001 103 1523 4
C523, C524	ECQV1H124JZ	001 106 2513 7
C525, C526	ECQB1H183JZ	001 106 3315 7
C527, C528	ECEA1AK220	
C529, C530	ECKD1H182KB	001 103 1479 1
C531, C532	ECKD1H182KB	001 103 1479 1
C601	ECEA1CGE332	001 120 5555 3
C602	ECEA1CGE222	001 120 6143 5
C603, C604	ECEA1CU222	001 120 3074 3
C605	ECEA1AU221	001 120 3131 1
C606	ECEA1AK330	001 120 0178 8
C607, C608	ECKD1H103PF	001 103 1449 7
C609, C610	ECKD1H103PF	001 103 1449 7
C611	ECEA1EK4R7	001 120 0294 5
C612	ECEA0JU222	001 120 3161 5
C613	ECEA1CKS100	001 120 2600 7
C614	ECEA1AU221	001 120 3131 1
C615	ECEA10V1000	001 120 3028 9
C616 (E, EH, EG) (EK, XL, XA) (XB, PA, PE)	ECKD2H682PEL	
C617 ⚠ (EK)	ECKDKC103PF2	001 103 3734 7
C617 (M, MC, E) (EH, EG, XL) (XA, XB, PA) (PE)	ECKDNS103ZV	001 103 6921 4
C618 (EG)	ECBT1H102KB	001 103 5026 0
C619	ECEA0JS102	001 120 0152 8
C801, C802	ECEA1HK010	001 120 0341 5
C803, C804	ECEA1EK4R7	001 120 0294 5
C805, C806	ECEA1CN100S	001 120 0233 8
C901, C902	ECKD1H103PF	001 103 1449 7
C903	ECQB1H822JZ	001 106 3383 5
C904	ECEA1CKS100	001 120 2600 7
C905	ECCD1H470K	001 103 0627 1
C906	ECEA1HK010	001 120 0341 5
C907, C908	ECCD1H330K	001 103 0567 6
C909, C910	ECEA1HK010	001 120 0341 5
C913	ECEA1HU2R2	001 120 3253 2
C914	ECEA1EK3R3	001 120 0292 7
C915 (EG)	ECKD1H103PF	001 103 1510 9
C970	ECEA1AU101	001 120 2830 5
C971	ECEA1CU101	001 120 2926 8
C972	ECEA1AK220	
C973	ECKD1H103PF	001 103 1443 3
C974	ECEA1CU101	001 120 2926 8

■ REPLACEMENT PARTS LIST

Notes: * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

* Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Code	Description
INTEGRATED CIRCUITS			
IC1	AN7016K	001 061 4629 4	I.C.
IC2, IC3	MN6634	001 061 0884 7	I.C., NR SELECTOR
IC4	MN6634	001 061 0884 7	I.C., NR SELECTOR
IC5, IC6	M5218L	001 060 3798 7	I.C., OPERATION AMP.
IC201, IC202	BA6146	001 060 8268 8	I.C., FL DRIVE
IC401	LC6554H-3426	001 061 5567 7	INTEGRATED CIRCUIT
IC401, IC402	TEA0665	001 060 7933 2	I.C., DOLBY B, C NR
IC501	AN6294NK		INTEGRATED CIRCUIT
IC801	LB1648	001 061 5517 7	INTEGRATED CIRCUIT

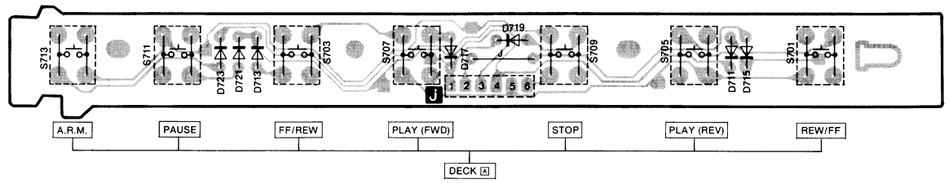
Ref. No.	Part No.	Part Code	Description
TRANSISTORS			
Q1, Q2	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q3, Q4	2SJ40CD	001 030 2807 5	TRANSISTOR
Q5, Q6	2SK381	001 030 4439 1	TRANSISTOR
Q7, Q8	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q9, Q10	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q11, Q12	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q13, Q14	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q15, Q16	2SC3311A-Q	001 030 5279 5	TRANSISTOR

Ref. No.	Part No.	Part Code	Description
Q17, Q18	2SD1450R	001 030 4366 1	TRANSISTOR
Q19, Q20	2SA1253-S	001 030 4843 3	TRANSISTOR
Q21, Q22	2SD1450R	001 030 4366 1	TRANSISTOR
Q25	UN4111	001 030 2899 5	TRANSISTOR
Q201	UN4211	001 030 4033 9	TRANSISTOR
Q202	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q301, Q302	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q303	2SD592NC-R	001 030 1759 0	TRANSISTOR
Q304	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q305	2SB621A-R	001 030 0668 6	TRANSISTOR
Q401, Q402	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q403, Q404	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q407	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q601	2SD1265-0	001 030 2652 6	TRANSISTOR
Q602	2SB941-P	001 030 2696 4	TRANSISTOR
Q603	2SD1265-0	001 030 2652 6	TRANSISTOR
Q604	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q801, Q802	2SA885Q	001 030 0457 5	TRANSISTOR
Q803, Q804	2SB621A-R	001 030 0668 6	TRANSISTOR
Q805, Q806	UN4211	001 030 4033 9	TRANSISTOR
Q807, Q808	2SC1846-R	001 030 1134 7	TRANSISTOR
Q809, Q810	UN4214	001 030 4835 3	TRANSISTOR
Q811, Q812	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q813, Q814	2SK381	001 030 4439 1	TRANSISTOR
Q815, Q816	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q901	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q902	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q903	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q904, Q905	UN4211	001 030 4033 9	TRANSISTOR
Q906	UN4211	001 030 4033 9	TRANSISTOR
Q908	2SA1309AQS	001 030 4846 0	TRANSISTOR
Q970, Q971	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q972	UN4111	001 030 2899 5	TRANSISTOR
Q979	2SC3311A-Q	001 030 5279 5	TRANSISTOR
Q980, Q981	UN4211	001 030 4033 9	TRANSISTOR
DIODES			
D1, D2	MA165	001 032 0494 0	DIODE
D201	MA4030M	001 032 5807 3	DIODE
D202	MA4043M	001 032 5574 1	DIODE
D301, D302	MA165	001 032 0494 0	DIODE
D505	MA165	001 032 0494 0	DIODE
D601, D602 ⚠	SVD1SR35200A	001 032 3951 4	RECTIFIER
D603, D604 ⚠	SVD1SR35200A	001 032 3951 4	RECTIFIER
D605, D606 ⚠	SVD1SR35200A	001 032 3951 4	RECTIFIER
D607, D608	MA165	001 032 0494 0	DIODE
D609, D610	MA4100M	001 032 4722 1	DIODE
D611	MA4068M	001 032 4954 7	DIODE
D612, D613 ⚠	SVD1SR35200A	001 032 3951 4	RECTIFIER
D701, D702	MA165	001 032 0494 0	DIODE
D703, D707	MA165	001 032 0494 0	DIODE
D708, D709	MA165	001 032 0494 0	DIODE
D711, D712	MA165	001 032 0494 0	DIODE
D713, D714	MA165	001 032 0494 0	DIODE
D715, D716	MA165	001 032 0494 0	DIODE
D717, D718	MA165	001 032 0494 0	DIODE
D719, D720	MA165	001 032 0494 0	DIODE
D721, D723	MA165	001 032 0494 0	DIODE
D725, D726	MA165	001 032 0494 0	DIODE
D801, D802 ⚠	SVD1SR35200A	001 032 3951 4	RECTIFIER
D803, D804	MA165	001 032 0494 0	DIODE
D805, D806	MA165	001 032 0494 0	DIODE
D807, D808	MA165	001 032 0494 0	DIODE
D809, D810	MA4043M	001 032 5574 1	DIODE
D811, D812	MA165	001 032 0494 0	DIODE
D813, D814	MA165	001 032 0494 0	DIODE
D815, D816	MA4075M	001 032 7212 6	DIODE
D817, D818	MA165	001 032 0494 0	DIODE
D819, D820	MA165	001 032 0494 0	DIODE
D821, D901	MA165	001 032 0494 0	DIODE
D902, D903	MA165	001 032 0494 0	DIODE
D904, D905	MA165	001 032 0494 0	DIODE
D906, D907	MA165	001 032 0494 0	DIODE
D908, D909	MA165	001 032 0494 0	DIODE
D910, D911	MA165	001 032 0494 0	DIODE
D912, D918	MA165	001 032 0494 0	DIODE
D970, D971	MA165	001 032 0494 0	DIODE
D975, D979	MA165	001 032 0494 0	DIODE
D980, D981	MA165	001 032 0494 0	DIODE
D982, D983	MA165	001 032 0494 0	DIODE
D984, D985	MA165	001 032 0494 0	DIODE
D986, D990	MA165	001 032 0494 0	DIODE
D992, D993	MA165	001 032 0494 0	DIODE
D997, D999	MA165	001 032 0494 0	DIODE
D999	MA165	001 032 0494 0	DIODE

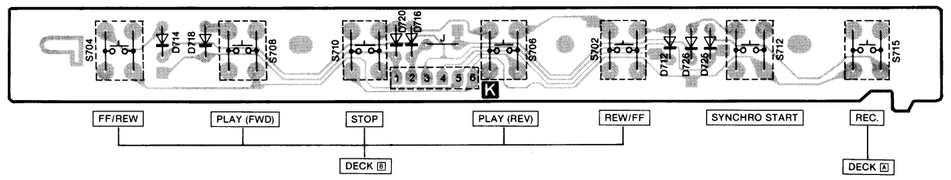
Ref. No.	Part No.	Part Code	Description
I.C.PROTECTORS			
ICP603	SRUN10	001 061 3071 4	IC PROTECTOR
ICP601, ICP602	SRUN15	001 061 2834 9	I.C.PROTECTOR
VARIABLE RESISTORS			
VR1, VR2	EVND4AA00B15	001 180 2243 2	V.R., 100KΩ(B)
VR3, VR4	EVND4AA00B24	001 180 2244 1	V.R., 20KΩ(B)
VR5, VR6	EVND4AA00B24	001 180 2244 1	V.R., 20KΩ(B)
VR7, VR8	EVND4AA00B14	001 180 2242 3	V.R., 10KΩ(B)
VR9, VR10	EVND4AA00B15	001 180 2243 2	V.R., 100KΩ(B)
VR11, VR12	SVR1F20A54	001 174 9177 3	VARIABLE RESISTOR
VR301, VR501	EVND4AA00B53	001 180 2319 9	V.R., 5KΩ(B)
VR801, VR802	EVN4LCA00B14	001 180 3116 4	V.R., 10KΩ(B)
VR803, VR804	EVND4AA00B14	001 180 2242 3	V.R., 10KΩ(B)
COILS AND TRANSFORMERS			
L1, L2	SLQX272-1YT	001 211 0649 2	CHOKE COIL
L3, L4	SLQX303-1K	001 211 1756 6	CHOKE COIL
L401, L402	QLB40048	001 210 7275 9	COIL
L403, L404	SLM1B8-K	001 211 2731 1	MPX COIL
T301	SL09C19-K	001 211 2472 1	OSCILLATOR COIL
T601 ⚠ (M, MC)	SLT5V18	001 202 9209 7	POWER TRANSFORMER
T601 ⚠ (E, EH, EG)	SLT5V19	001 202 9210 4	POWER TRANSFORMER
T601 ⚠ (EK, XL)	SLT5V20	001 202 9183 0	POWER TRANSFORMER
T601 ⚠ (XA, XB, PA)	SLT5V21	001 202 9113 4	POWER TRANSFORMER
OSCILLATORS			
X901	SVFCSA300MG	001 241 1296 5	CERAMIC FILTER
SWITCHES			
S601 ⚠	ESB8249V	003 435 5877 0	POWER SWITCH
S602 ⚠ (XA, XB, PA)	SSR187-1	003 430 2201 5	SW, VOLTAGE SELECT
S701, S702	EVQQAC05G	003 439 2072 1	SW
S703, S704	EVQQAC05G	003 439 2072 1	SW
S705, S706	EVQQAC05G	003 439 2072 1	SW
S707, S708	EVQQAC05G	003 439 2072 1	SW
S709, S710	EVQQAC05G	003 439 2072 1	SW
S711, S712	EVQQAC05G	003 439 2072 1	SW
S713, S715	EVQQAC05G	003 439 2072 1	SW
S721, S722	EVQQAC05G	003 439 2072 1	SW
S723, S724	EVQQAC05G	003 439 2072 1	SW
S731, S732	EVQQAC05G	003 439 2072 1	SW
S741, S742	EVQQAC05G	003 439 2072 1	SW
S743, S744	EVQQAC05G	003 439 2072 1	SW
S750	SSS157	003 431 3020 9	SW
S901	SMQA1058	003 435 6131 1	SW, PACK
S902	SMQA1059	003 435 6132 0	SW
S903	SMQA1058	003 435 6131 1	SW, PACK
S904	SMQA1040	003 434 1025 7	SW
S905, S906	SMQA1023	003 434 1024 8	SW
S907	SMQA1058	003 435 6131 1	SW, PACK
S908, S909	SMQA1023	003 434 1024 8	SW
OTHERS (LED PCB DECK A, B)			
D1, D2	MA165	001 032 0494 0	DIODE
D3, D4	MA165	001 032 0494 0	DIODE
D5, D6	MA165	001 032 0494 0	DIODE
D7	LN363GCPP	001 032 7262 6	DIODE, GAASP
D8	LN863RCPP	001 032 7263 5	L.E.D
D9	LN363GCPP	001 032 7262 6	DIODE, GAASP
D10 (M, MC)	LN363GCPP	001 032 7262 6	DIODE, GAASP
D11	LN863RCPP	001 032 7263 5	L.E.D
D12	LN363GCPP	001 032 7262 6	DIODE, GAASP
D13	LN463YCPPU	001 032 7258 2	LED
D14, D16	LN363GCPP	001 032 7262 6	DIODE, GAASP
D17 (M, MC)	LN363GCPP	001 032 7262 6	DIODE, GAASP
D18	LN363GCPP	001 032 7262 6	DIODE, GAASP
R1, R2	ERDS2TJ271	001 152 2435 4	CARBON, 270Ω, 1/4W
R3, R4	ERDS2TJ271	001 152 2435 4	CARBON, 270Ω, 1/4W
R5, R6	ERDS2TJ271	001 152 2435 4	CARBON, 270Ω, 1/4W
R7, R8	ERDS2TJ271	001 152 2435 4	CARBON, 270Ω, 1/4W
R9, R10	ERDS2TJ271	001 152 2435 4	CARBON, 270Ω, 1/4W
R11	ERDS2TJ271	001 152 2435 4	CARBON, 270Ω, 1/4W

■ PRINTED CIRCUIT BOARDS

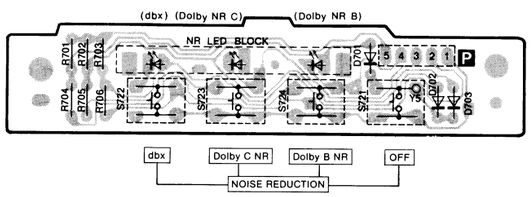
X OPERATION SW P.C.B. (1)



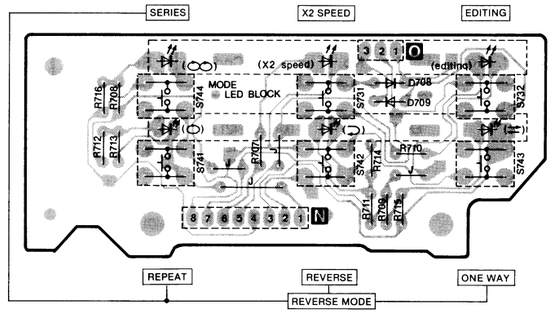
XI OPERATION SW P.C.B. (2)



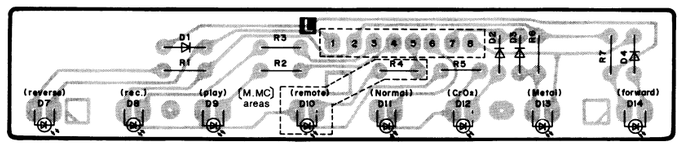
IX NOISE REDUCTION SW P.C.B.



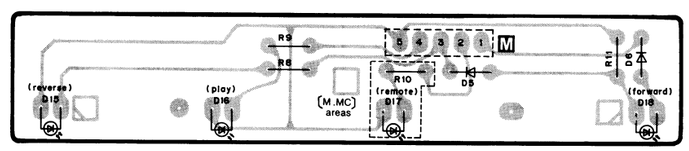
III MODE SELECTORS P.C.B.



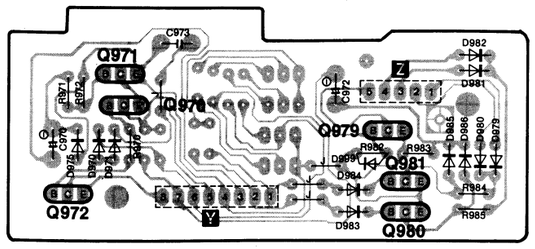
XII LED P.C.B. (DECK A)



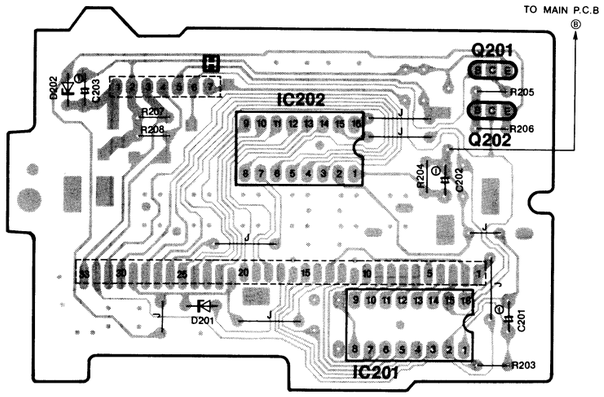
XIII LED P.C.B. (DECK B)



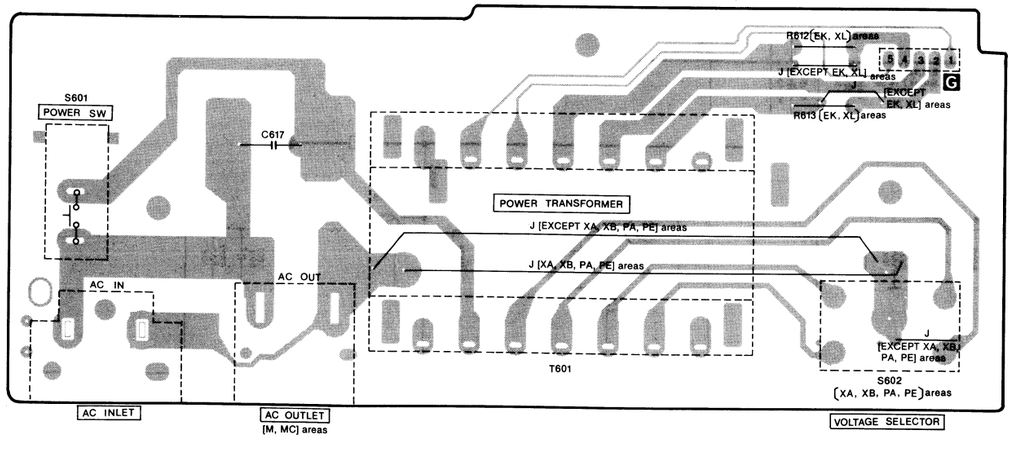
VII SUB P.C.B.



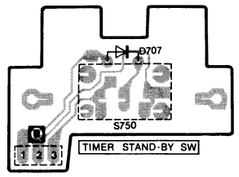
V FL METER P.C.B.



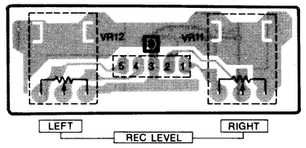
II POWER SUPPLY P.C.B.



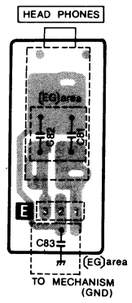
VI TIMER P.C.B.



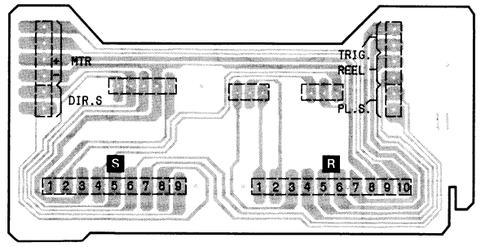
IV REC. LEVEL CONTROLS P.C.B.



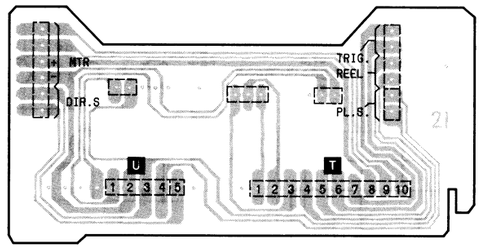
VII HEAD PHONES P.C.B.



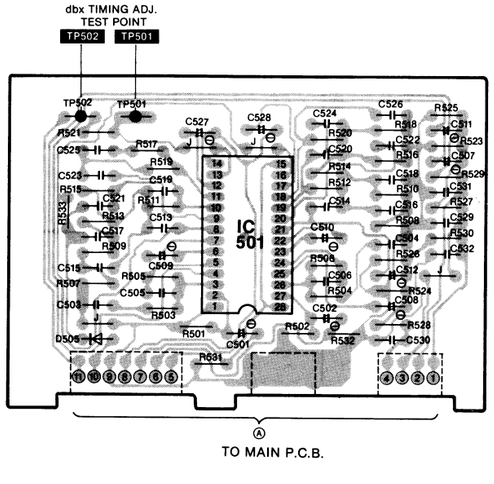
XV MECHANISM P.C.B. (DECK A)



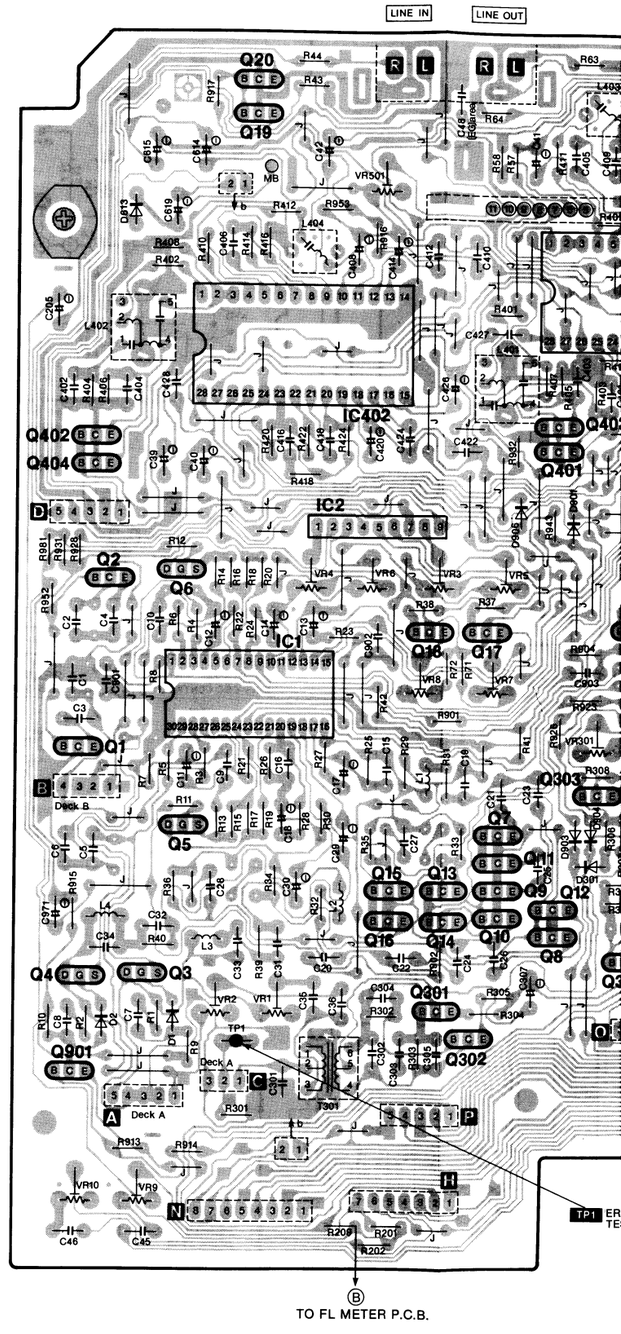
XVI MECHANISM P.C.B. (DECK B)



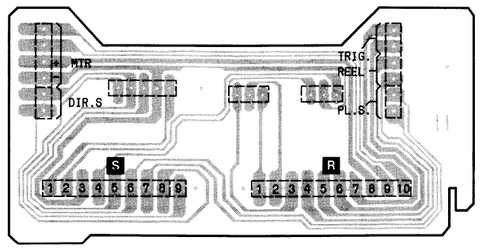
XIV dbx P.C.B.



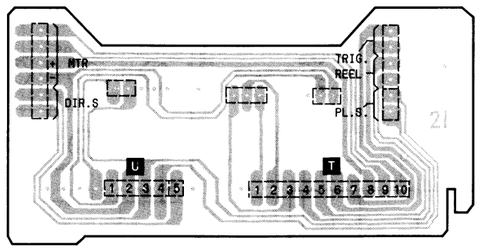
I MAIN P.C.B.



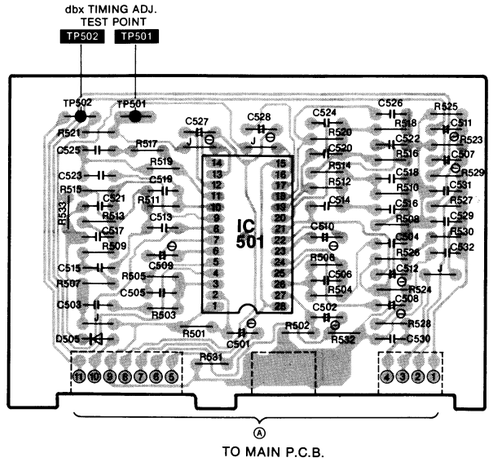
XV MECHANISM P.C.B. (DECK A)



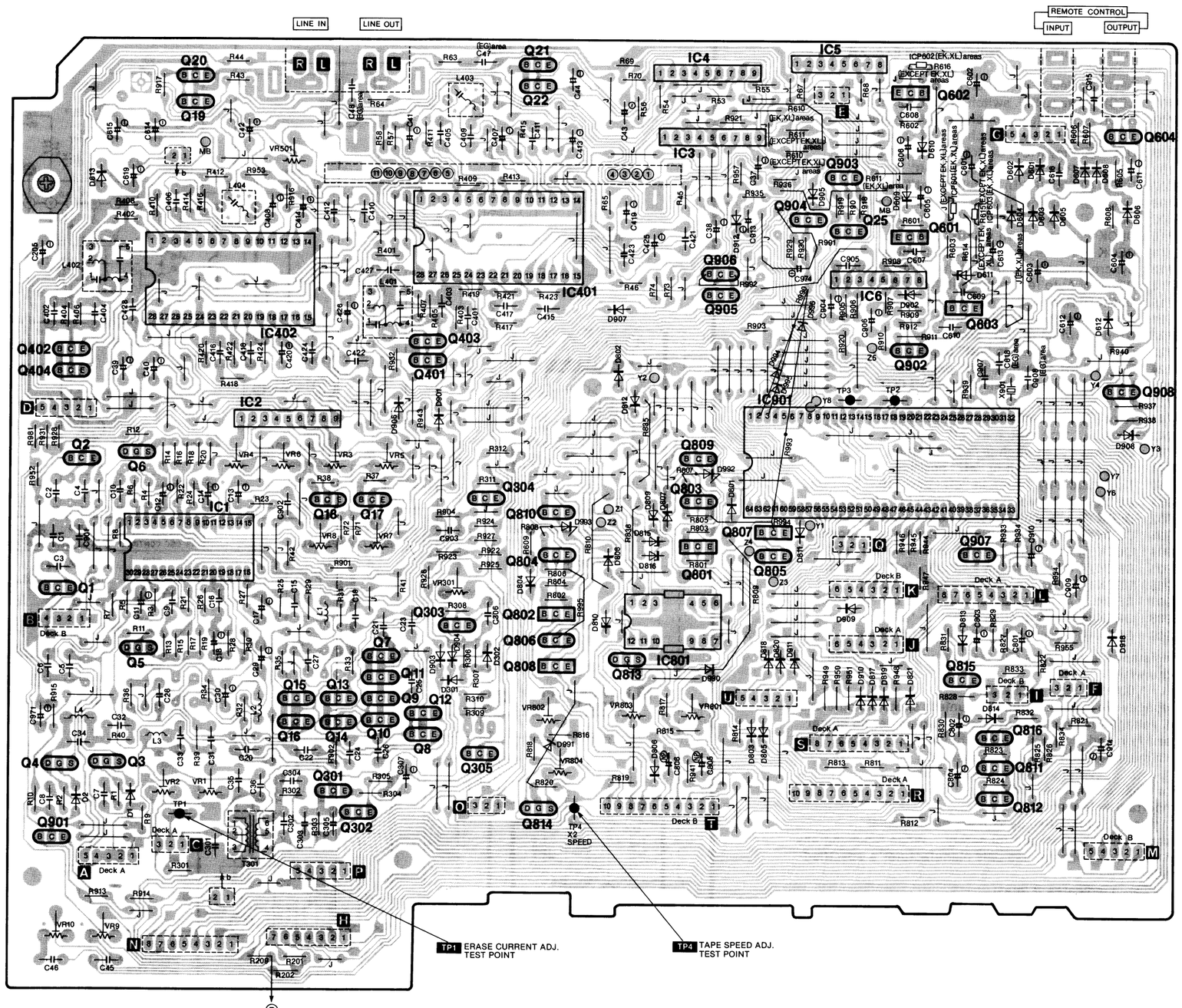
XVI MECHANISM P.C.B. (DECK B)



XIV dbx P.C.B.



I MAIN P.C.B.



※ Caution!
The microcomputer for system control of this unit (Ref No. IC901) has been changed during production.

(OLD) LC6554H-3355 ➡ (NEW) LC6554H-3426
New type is supplied as the replacement part.

■ SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

Notes:

- **S601** : Power switch in "**on**" position.
- **S602** : Voltage selector in "**240V**" position ([XA, XB, PA, PE] areas).
- **S701** : DECK [A] Rew./F.F. switch in "**off**" position.
- **S702** : DECK [B] Rew./F.F. switch in "**off**" position.
- **S703** : DECK [A] F.F./Rew. switch in "**off**" position.
- **S704** : DECK [B] F.F./Rew. switch in "**off**" position.
- **S705** : DECK [A] Play (REV) switch in "**off**" position.
- **S706** : DECK [B] Play (REV) switch in "**off**" position.
- **S707** : DECK [A] Play (FWD) switch in "**off**" position.
- **S708** : DECK [B] Play (FWD) switch in "**off**" position.
- **S709** : DECK [A] Stop switch in "**off**" position.
- **S710** : DECK [B] Stop switch in "**off**" position.
- **S711** : DECK [A] Pause switch in "**off**" position.
- **S712** : Syncro-recording-start switch in "**off**" position.
- **S713** : DECK [A] Auto rec. mute switch in "**off**" position.
- **S715** : DECK [A] Rec. switch in "**off**" position.
- **S721** : NR off switch in "**off**" position.
- **S722** : NR dbx switch in "**off**" position.
- **S723** : Dolby C NR switch in "**off**" position.
- **S724** : Dolby B NR switch in "**off**" position.
- **S731** : Editing-tape-speed selector in "**off (X1)**" position.
- **S732** : Edit-recording switch in "**off**" position.
- **S741** : Repeat (⇆) switch in "**off**" position.
- **S742** : Reverse (⇄) switch in "**off**" position.
- **S743** : One way (⇉) switch in "**off**" position.
- **S744** : Series (⇶) switch in "**off**" position.

  } Reverse mode selectors

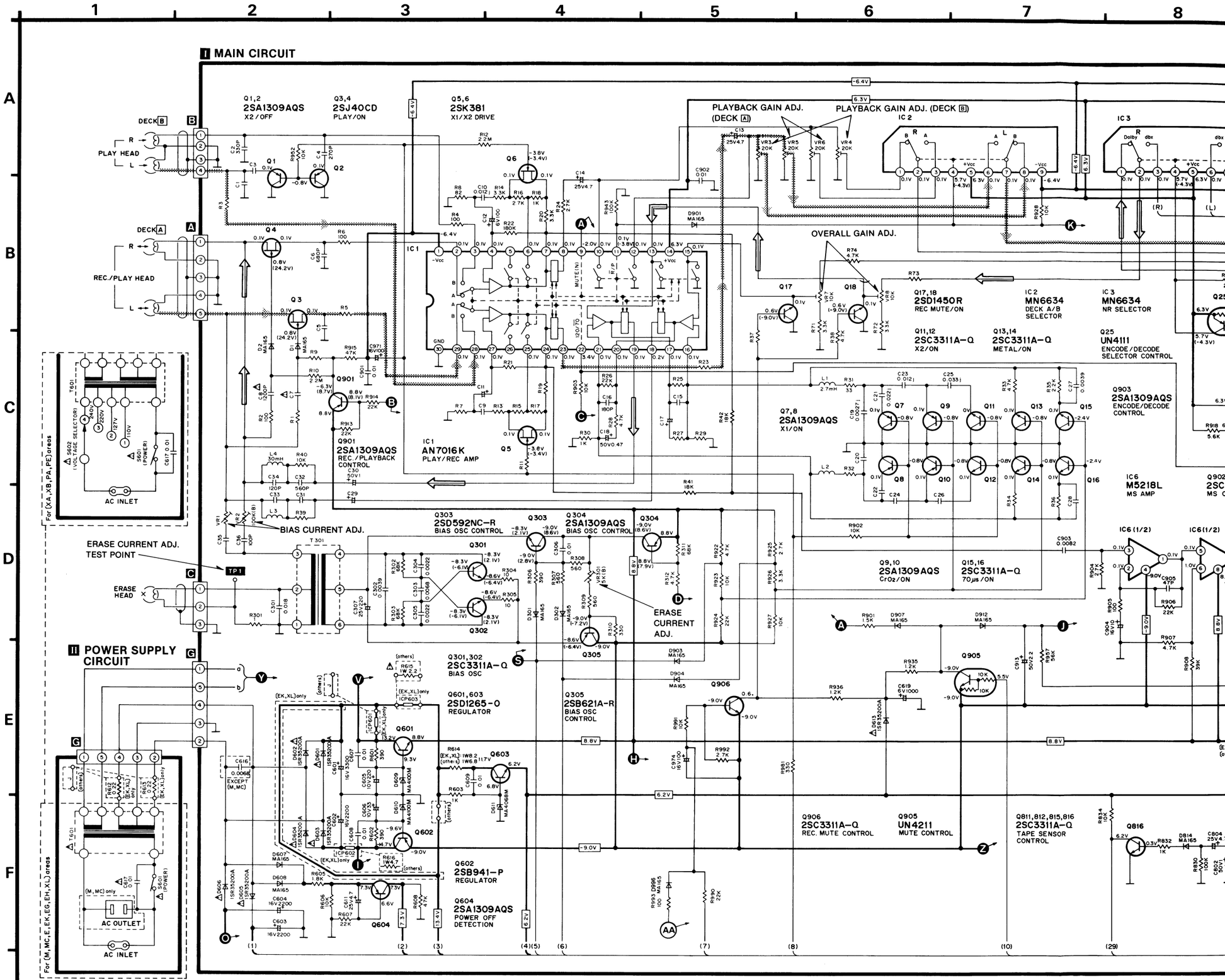
- **S750** : Timer stand-by switch in "**off**" position.
- **S901** : DECK [A] ATS (Metal/CrO_2) switch in "**off**" position.
- **S902** : DECK [A] ATS (70/120μs) switch in "**off**" position.
- **S903** : DECK [A] Rec. inhibit (REV) switch in "**off**" position.
- **S904** : DECK [A] Rec. inhibit (FWD) switch in "**off**" position.
- **S905** : DECK [A] Play ditection switch in "**off**" position.
- **S906** : DECK [A] Direction switch in "**off**" position.
- **S907** : DECK [B] ATS (70/120μs) switch in "**off**" position.
- **S908** : DECK [B] Play ditection switch in "**off**" position.
- **S909** : DECK [B] Direction switch in "**off**" position.

- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.
  1K=1,000 (Ω), 1M=1,000k (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
  ( )..... Voltage values at record mode.
  For measurement use EVM.
- Important safety notice
  Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- (—□—) indicates B (bias).
- (▒▒▒) indicates the flow of the playback signal.
- (⟹) indicates the flow of the record signal.

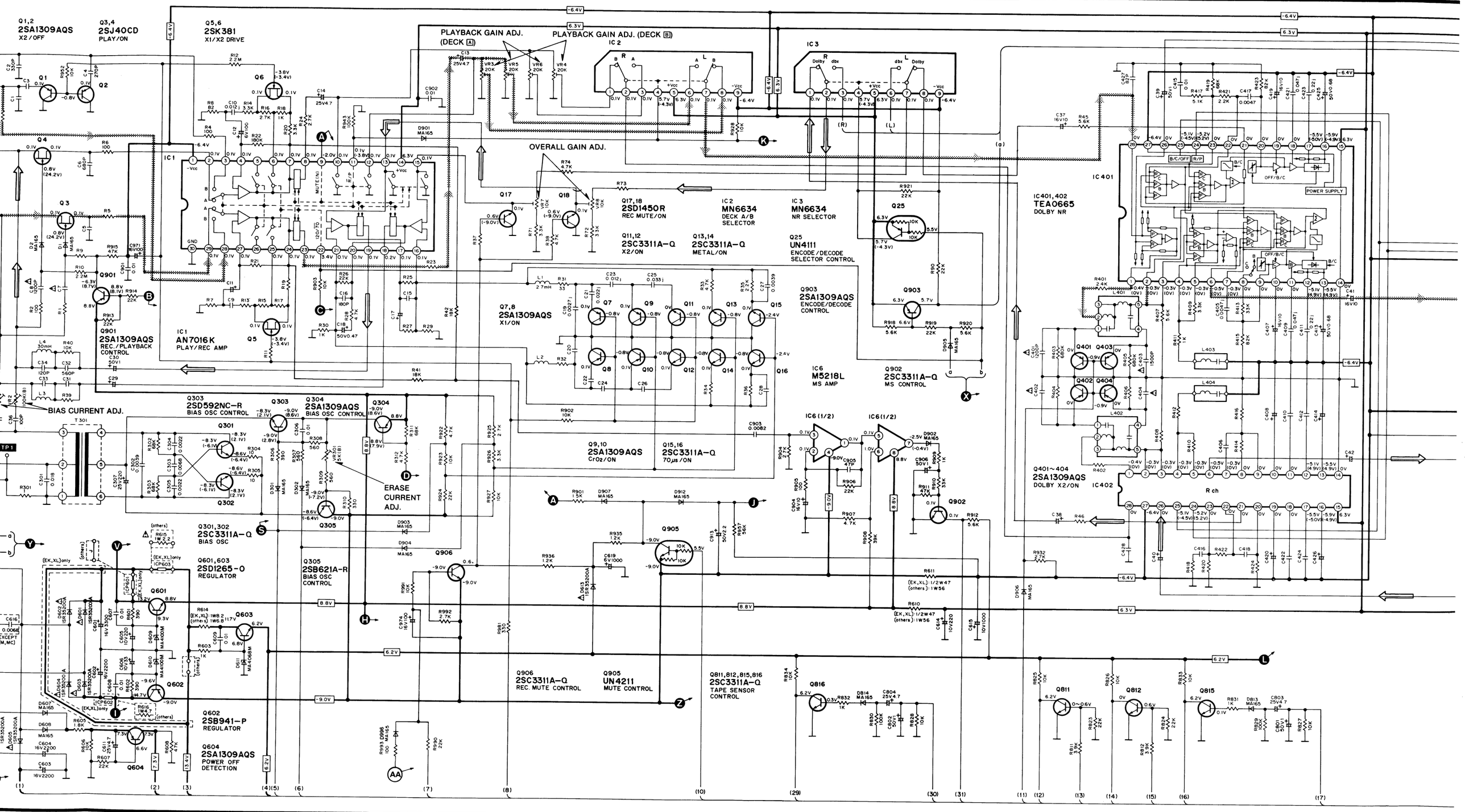
∗ Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

∗ Cover the parts boxes made of plastics with aluminum foil.
∗ Ground the soldering iron.
∗ Put a conductive mat on the work table.
∗ Do not touch the legs of IC or LSI with the fingers directly.



AIN CIRCUIT


Q1,2
2SA1309AQS
X2/OFF
Q3,4
2SJ40CD
PLAY/ON
Q5,6
2SK381
X1/X2 DRIVE
PLAYBACK GAIN ADJ. (DECK A)
PLAYBACK GAIN ADJ. (DECK B)
OVERALL GAIN ADJ.
IC1
AN7016K
PLAY/REC AMP
Q901
2SA1309AQS
REC./PLAYBACK CONTROL
BIAS CURRENT ADJ.
Q303
2SD592NC-R
BIAS OSC CONTROL
Q304
2SA1309AQS
BIAS OSC CONTROL
ERASE CURRENT ADJ.
Q301,302
2SC3311A-Q
BIAS OSC
Q305
2SB621A-R
BIAS OSC CONTROL
Q601,603
2SD1265-O
REGULATOR
Q602
2SB941-P
REGULATOR
Q604
2SA1309AQS
POWER OFF DETECTION
Q17,18
2SD1450R
REC MUTE/ON
IC2
MN6634
DECK A/B SELECTOR
IC3
MN6634
NR SELECTOR
Q11,12
2SC3311A-Q
X2/ON
Q13,14
2SC3311A-Q
METAL/ON
Q25
UN4111
ENCODE/DECODE SELECTOR CONTROL
Q7,8
2SA1309AQS
X1/ON
Q903
2SA1309AQS
ENCODE/DECODE CONTROL
IC6
M5218L
MS AMP
Q902
2SC3311A-Q
MS CONTROL
Q9,10
2SA1309AQS
CrO2/ON
Q15,16
2SC3311A-Q
70μs/ON
Q906
2SC3311A-Q
REC. MUTE CONTROL
Q905
UN4211
MUTE CONTROL
Q811,812,815,816
2SC3311A-Q
TAPE SENSOR CONTROL
IC401,402
TEA0665
DOLBY NR
Q401~404
2SA1309AQS
DOLBY X2/ON
IC402
R ch
POWER SUPPLY
B/C/OFF
R/P
OFF/B/C
(EK,XL)only
(others)

VIII HEAD PHONES CIRCUIT

IV REC. LEVEL CONTROLS CIRCUIT

XIII dbx CIRCUIT

IC4
MN6634
NR SELECTOR

IC5
M5218L
HEADPHONE AMP.

Q21,22
2SD1450R
LINE MUTE (MUTE ON)

Q19,20
2SA1253-S
LINE MUTE (REC/OFF)

Q908
2SA1309AQS
REMOTE CONTROL

Q801
2SA885Q
PLUNGER CONTROL

Q803
2SB621A-R
MOTOR CONTROL (DECK A)

IC801
LB1648
REEL MOTOR CONTROL

Q804
2SB621A-R
MOTOR CONTROL (DECK B)

Q805,806
UN4211
PLUNGER CONTROL

Q807,808
2SC1846-R
PLUNGER CONTROL

Q802
2SA885Q
PLUNGER CONTROL

Q810
UN4214
MOTOR CONTROL (DECK B)

IC501
AN6294NK
dbx AMP.

※IC901
LC6554H-3355
MICRO-COMPUTER

Q907
2SC3311A-Q
RESET

Q809
UN4214
MOTOR CONTROL (DECK A)

Q813
2SK381
TAPE SPEED CONTROL

FLUORESCENT METER LEVEL ADJ.

dbx TIMING ADJ.

dbx TIMING ADJ. TEST POINT

TAPE SPEED ADJ. TEST POINT

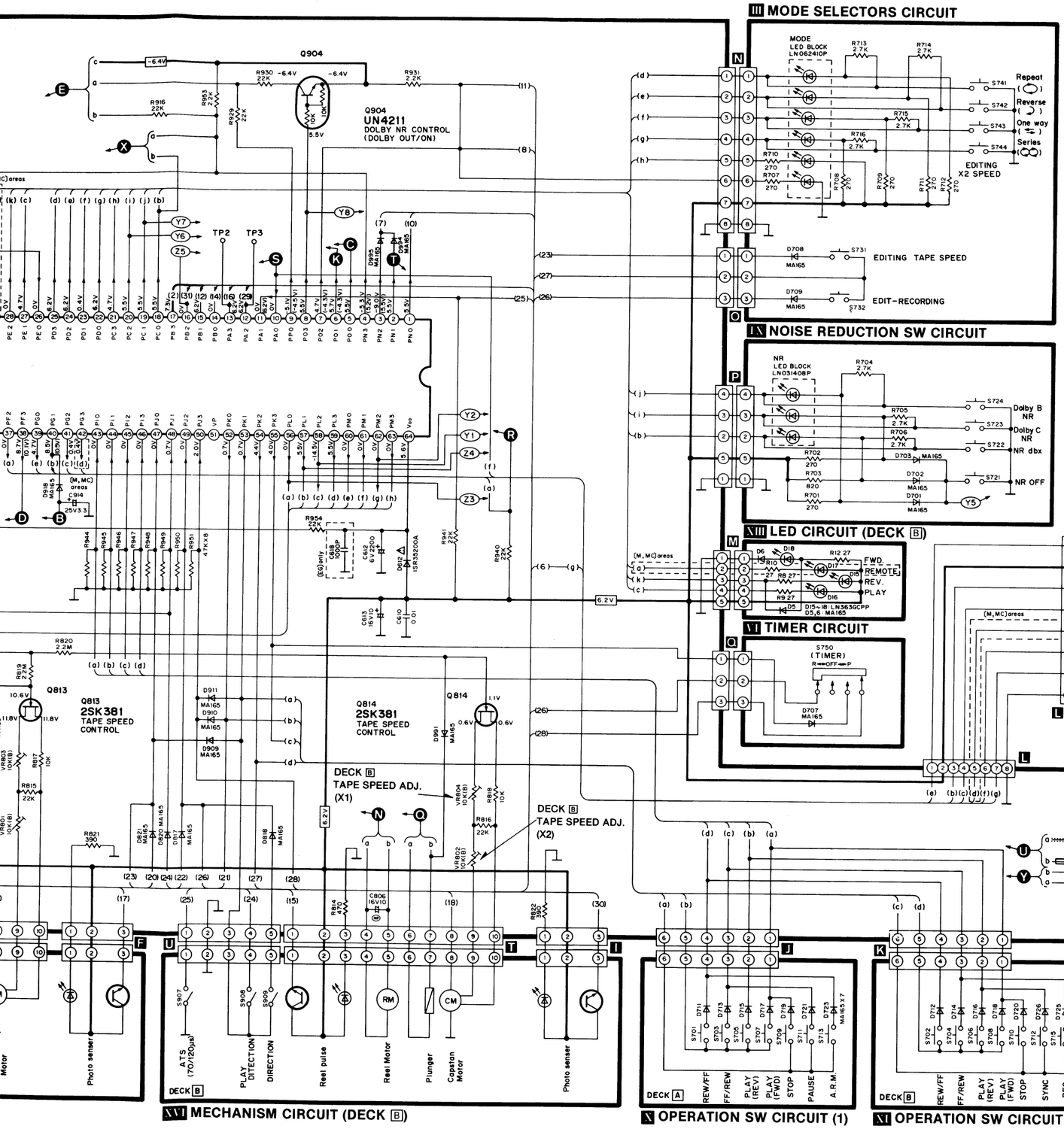
DECK A TAPE SPEED ADJ. (X1)

DECK A TAPE SPEED ADJ. (X2)

ATS (Metal/CrO2)
ATS (70/120μs)
REC. INHIBIT (REV.)
REC. INHIBIT (FWD.)
PLAY DITECTION
DIRECTION
Reel pulse
Reel Motor
Plunger
Capstan Motor
Photo senser
DECK A

ATS (70/120μs)
PLAY DITECTION
DIRECTION
DECK B

MECHANISM CIRCUIT (DECK A)



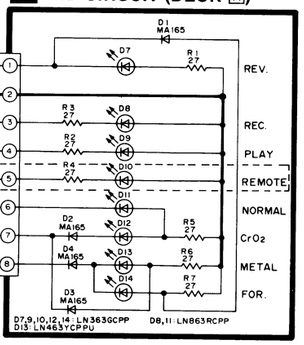
III MODE SELECTORS CIRCUIT

IX NOISE REDUCTION SW CIRCUIT

XIII LED CIRCUIT (DECK B)

XI TIMER CIRCUIT

XII LED CIRCUIT (DECK A)



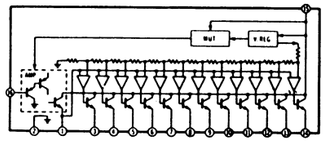
XVI MECHANISM CIRCUIT (DECK B)

X OPERATION SW CIRCUIT (1)

XI OPERATION SW CIRCUIT (2)

■ EQUIVALENT CIRCUIT

IC201, 202: BA6146



- **SPECIFICATIONS** ＊Input level control...MAX

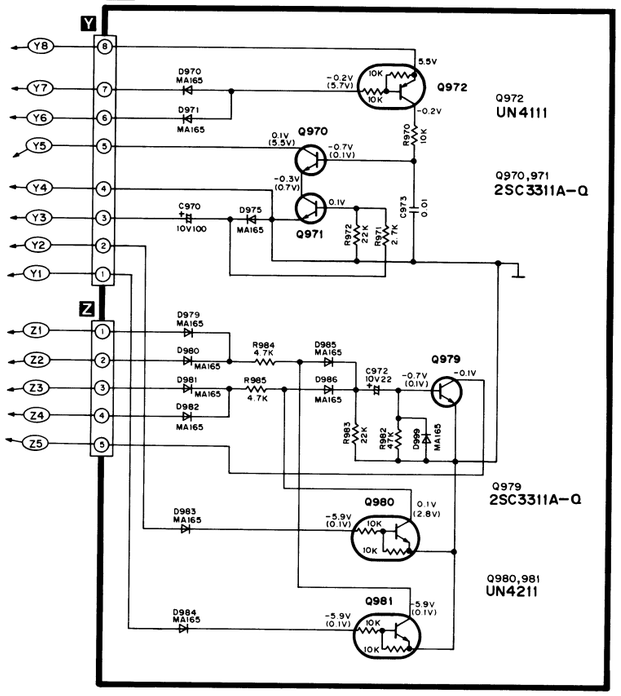
Playback S/N ratio ＊Test tape...QZZCFM	Greater than 45dB
Overall distortion ＊Test tape ...QZZCRA for Normal ...QZZCRX for CrO_2 ...QZZCRZ for Metal	Normal... Less than 3.5% CrO_2, Metal... Less than 4%
Overall S/N ratio ＊Test tape...QZZCRA	Greater than 43dB (without NAB filter)

※ Caution!
The microcomputer for system control of this unit (**Ref No. IC901**) has been changed during production.

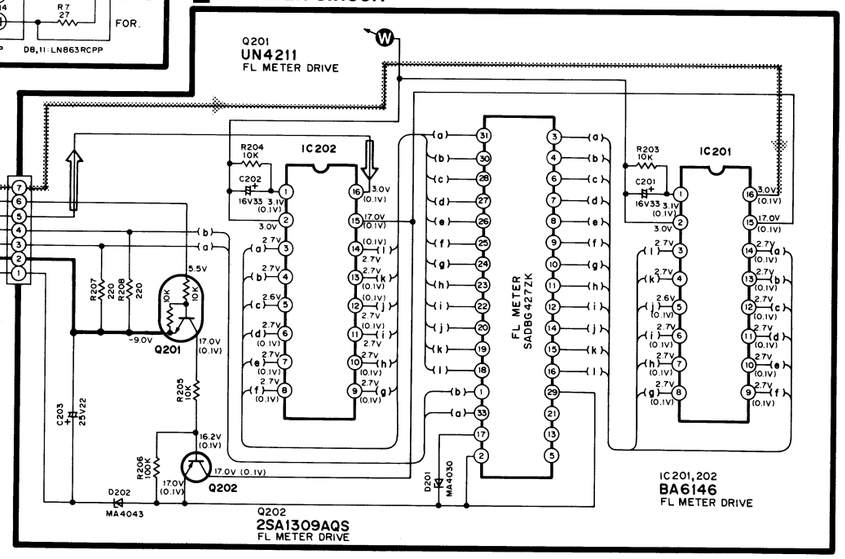
(OLD) LC6554H-3355 ➡ (NEW) **LC6554H-3426**

New type is supplied as the replacement part.

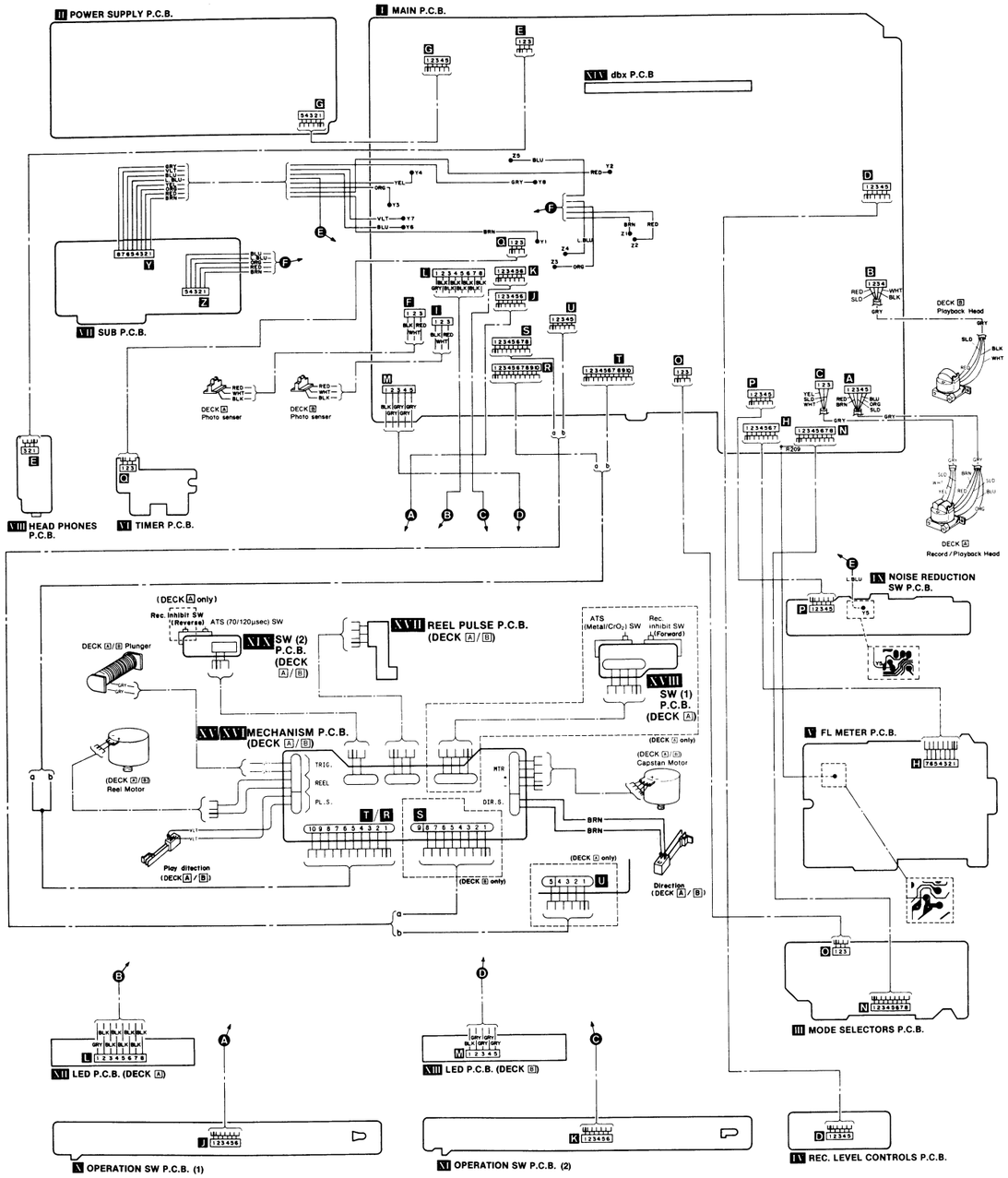
VII SUB CIRCUIT



V FL METER CIRCUIT



■ WIRING CONNECTION DIAGRAM



■ REPLACEMENT PARTS LIST

Notes: * Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Code	Description
CASSETTE DECK			
101	SMQA1043	005 500 7741 7	SCREW
102	SMQA1118	001 270 1891 9	MAGNETIC HEAD TAPE B
102	SMQA1141		MAGNETIC HEAD TAPE A
103	SMQA1046	005 507 1969 8	NUT TAPE B
104	SMQA1047	016 641 0257 9	GUIDE
105	SMQA1048	001 036 0036 2	PHOTO ELECTRIC TRANSDUCER
106	SMQA1049	016 726 0878 6	COIL SPRING
107	SMQA1050	016 726 0879 5	COIL SPRING
108	SMQA1051	016 630 1779 5	PLATE
109	SMQA1004	016 726 0826 8	SPRING
110	SMQA1164	016 713 0416 3	SCREW
111	XTS3+6F	005 501 3545 0	TAPPING SCREW
112	SMQA1005	016 740 0114 1	ROLLER
113	SMQA1006	016 726 0825 9	SPRING
114	SMQA1052	016 740 0121 2	ROLLER
115	SMQA1053	016 726 0880 2	COIL SPRING
116	SMQA1091	016 862 1061 4	INDICATION PLATE,LABEL
117	SMQA1054	016 630 1780 2	PLATE
118	SMQA1010	016 765 0056 7	WASHER
119	SMQA1013	016 913 0004 5	REEL
120	SMQA1026	016 913 0003 6	REEL
121	SMQA1014	016 641 0246 2	WASHER
122	SMQA1007	016 862 1041 8	WASHER
123	XTN3+10G	005 501 0353 8	SCREW TAPE A
124	SMQA1009	016 643 0966 7	SPACER
125	SMQA1055	016 717 0257 0	ARM
126	SMQA1012	016 726 0835 7	SPRING
127	SMQA1056	016 718 3358 9	LEVER
128	XTN3+4F	005 501 0412 4	TAPPING SCREW
129	SMQA1181	003 455 0411 8	PLUNGER
132	SMQA1147	016 630 1884 5	CHASSIS ASS'Y
133	SMQA1061	016 742 0039 5	IDLER PULLEY
134	SMQA1106		TAPE B
135	SMQA1024	016 726 0834 8	SPRING
136	SMQA1062	016 726 0881 1	SPRING
137	XYN26+C3	005 503 0738 5	SCREW
138	SMQA1029	016 640 0459 6	CAP
139	SMQA1063	016 630 1783 9	PLATE
140	SMQA1064	016 726 0882 0	COIL SPRING
141	SMQA1023	003 434 1024 8	SW
142	XTN2+7C	005 501 3506 7	TAPPING SCREW
143	SMQA1031	005 513 4185 4	WASHER
144 (M, MC, XL) (XA, XB, PA) (PE)	SMQA1065	016 756 0084 4	WHEEL
144 (E, EH, EG) (EK)	SMQA1096	016 756 0086 2	WHEEL TAPE A TAPE A
145	SMQA1032	016 756 0083 5	WHEEL
(E, EH, EG) (EK)			
145	SMQA1066	016 756 0085 3	WHEEL TAPE A
(M, MC, XL) (XA, XB, PA) (PE)			TAPE A TAPE A
146	SMQA1123	016 745 0226 9	GEAR
147	SMQA1097	016 643 1004 4	SPACER
148	SMQA1068	016 650 5303 9	BRACKET
149	XTN26+6C	005 501 0318 1	TAPPING SCREW
150	SMQA1069	016 718 3359 8	DET. LEVER
151	SMQA1070	003 454 0638 6	PLUNGER
152	XTN26+8C	005 501 0323 4	TAPPING SCREW
153	SMQA1071	016 643 0989 0	WASHER
155	SMQA1073	016 718 3360 5	LEVER
156 [M, MC, XL, XA, XB]	SMQA1074	016 752 0127 0	FLAT BELT
156 [E, EH, EG, EK]	SMQA1124	016 754 0077 3	ANGULAR BELT
157	SMQA1125	002 310 2495 4	DC MOTOR
158	SMQA1036	002 310 2270 9	DC MOTOR
159	SMQA1076	016 631 0055 3	FRAME,HOLDER
160	SMQA1025	016 718 3349 0	DET. LEVER
161	XTN26+5F	005 501 0310 9	SCREW TAPE A
162	SMQA1223	016 632 1950 2	ANGLE
165	SMQA1079	016 640 0487 2	CAP
166	XYN26+C6	005 503 0554 1	SCREW
167	SMQA1080	016 717 0258 9	ARM
168	SMQA1081	016 717 0259 8	ARM
169	SMQA1082	016 726 0884 8	COIL SPRING
170	SMQA1083	016 726 0886 6	COIL SPRING
171	SMQA1148	016 632 1947 7	ANGLE
172	SMQA1149	016 632 1946 8	ANGLE
173	SMQA1114	016 718 3414 8	DOOR ROCK
174	SMQA1131	016 718 3378 5	LEVER
175	SMQA1133	016 726 0935 4	COIL SPRING
176	XTS2+4F	005 501 4873 3	TAPPING SCREW
177	SMQA1221	016 643 1080 2	COLOR
178	SMQA1222	016 713 0438 7	SCREW
179	XTN3+5C	005 501 3249 5	TAPPING SCREW
180	SMQA1058	003 435 6131 1	SW, PACK
181	SMQA1059	003 435 6132 0	SW
182	SMQA1021	016 643 0965 8	SPACER
183	SMQA1041	001 035 0392 0	PHOTO ELECTRIC TRANSDUCER
184	SMQA1022	016 643 0964 9	SPACER
185	SMQA1040	003 434 1025 7	SW
186	SJT30540LX-V	003 410 5996 1	CONNECTOR(5-P) TAPE B
186	SJT30640LX-V	003 410 6149 8	CONNECTOR(6-P) TAPE A
186	SJT30840LX-V	003 410 5998 9	CONNECTOR(8-P) TAPE A
186	SJT31040LX-V	003 410 6112 1	LUG TERMINAL TAPE A

■ MECHANIC

SPECIFICATIONS

NOTE: The value indica
fluctuate during
In that case, obta

Pressure of pressure ro
Takeup tension * Use cassette torque meter.....QZZSRKCT
Wow and flutter; (JIS) * Use test tape .....QZZCWAT

NOTES:

- When changing mecha grease to the are mark "Mechanical Parts Lo

Ref. No.	Part
❶	MOLYKOT

ns specify the

d for all areas.

cription
CREW
CREW
LT
ER
EW
EW
RIC TRANSDUCER
P)
P)
P)

■ MECHANICAL PARTS LOCATION

SPECIFICATIONS

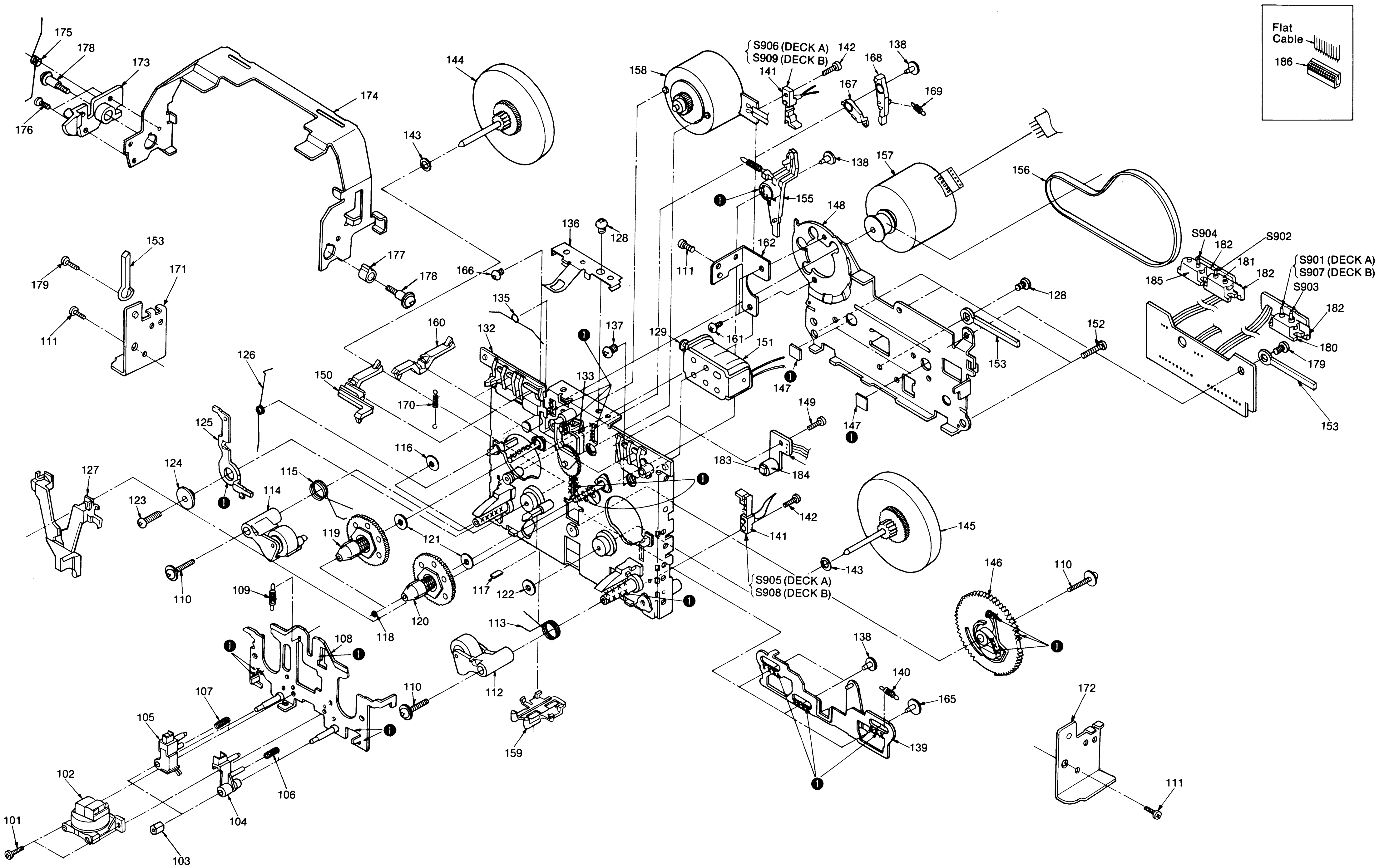
NOTE: The value indicated by the torque tape may fluctuate during torque measurement. In that case, obtain the middle of the values.

Pressure of pressure roller	350±50 g
Takeup tension * Use cassette torque meter......QZZSRKCT	30~60 g-cm
Wow and flutter; (JIS) * Use test tape ......QZZCWAT	Less than 0.07% (WRMS) [EG] 0.08% (WRMS) [E, EH, EK] 0.14% (WRMS) [others]

NOTES:

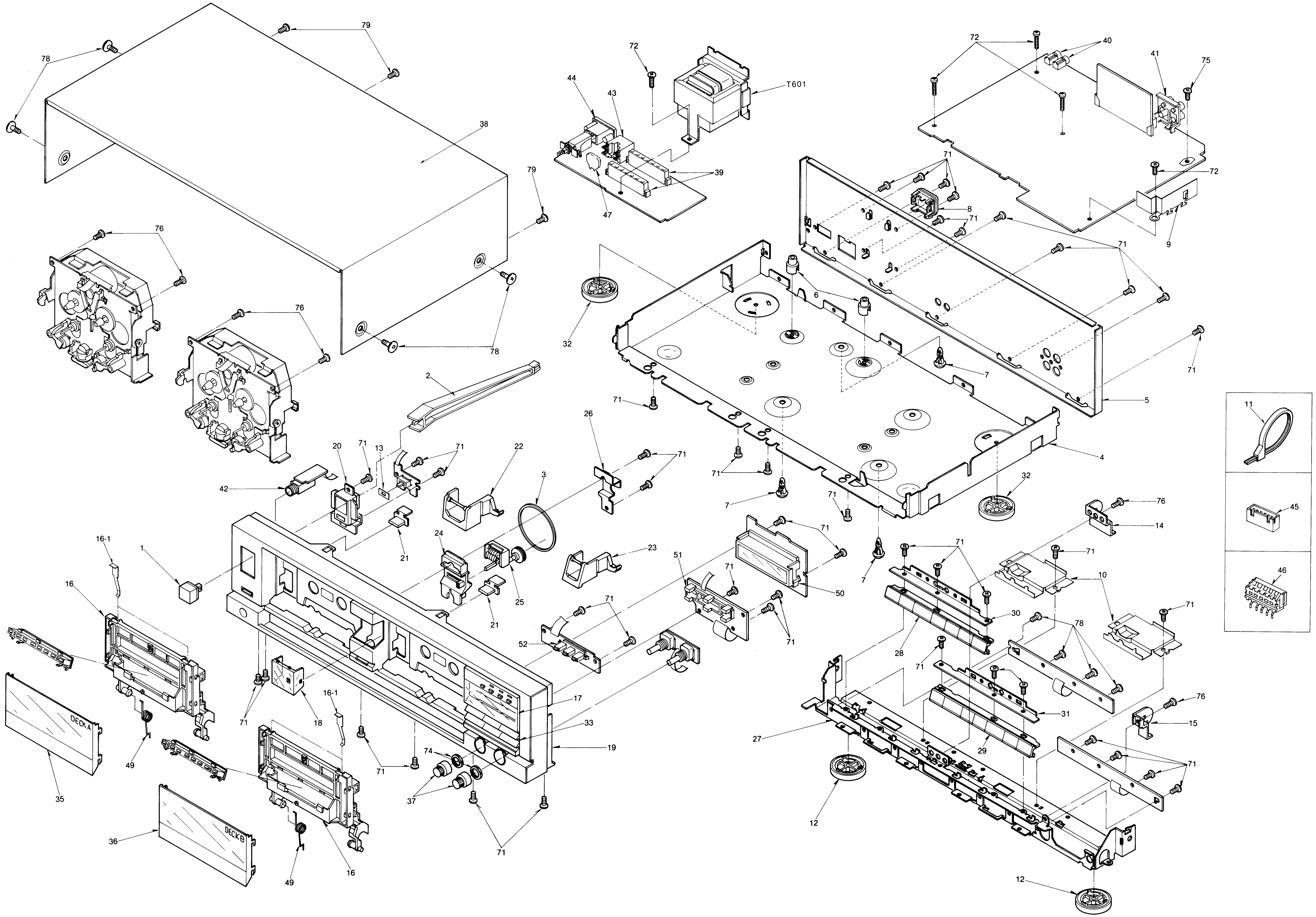
- When changing mechanism parts. apply the specified grease to the are marked "× ×" shown in the drawing "Mechanical Parts Location".

Ref. No.	Part Name	Part No.
❶	MOLYKOTE	RZZ0L05



176 179 175 178 173 171 174 177 170 178 160 166 160 183 161 162 184 167 168 169 165 172 185 182 181 182 186 179 180 182
153 150 143 144 132 135 159 136 133 137 158 141 151 141 147 155 149 142 148 142 138 157 147 143 138 138 140 139 145 146 153 156 152 153
101 111 102 127 123 105 124 110 103 125 107 126 104 109 114 115 106 119 108 118 116 110 120 121 117 112 113 122 128 129 111 128 110 111

■ CABINET PARTS LOCATION



78 76 76 71 79 71 71 71 74 78 71 79 71 71 72 71 71 71 71 71 71 71 71 71 71 71 72 71 78 71 76 71 71·72 76 71 75
35 49 36 38 49 42 37 33 52 47 32 26 43 44 39 51 50 27 28 30 29 31 32 40 41 45 46
16-1 16 1 18 16 16-1 20 13 21 24 2 22 21 17 25 3 19 23 7 6 12 4 7 8 7 5 10 12 14 9 11

D

■ REPLACEMENT PARTS LIST

Notes: * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

* Ⓚ-marked parts are used for black only, while Ⓢ-marked parts are for silver type only.
* Part other than Ⓚ-and Ⓢ-marked are use for both black and silver type.

Ref. No.	Part No.	Part Code	Description
CABINET AND CHASSIS			
1 Ⓢ	SBC666	016 702 5545 6	BUTTON, POWER
1 Ⓚ	SBC666-5	016 702 6679 9	BUTTON, POWER
2	SUB266-1	016 712 0372 3	ROD
3	SMQ20022	016 754 0076 4	COUNTER BELT
4	SKU11750	016 802 2204 9	BOTTOM BOARD
5 (E)	SGP7140-1B	016 840 8045 8	REAR PANEL
5 (EH, EG)	SGP7140-1D	016 840 8135 7	REAR PANEL
5 (EK)	SGP7140-1F	016 840 7925 9	REAR PANEL
5 (XL)	SGP7140-1H	016 840 8134 8	REAR PANEL
5 (XA, XB, PA) (PE)	SGP7140-2B	016 840 8005 6	REAR PANEL
5 (M, MC)	SGP7140B	016 840 7953 5	REAR PANEL
6	SHE185	016 918 0330 9	SPACER
7	SHR9804	016 652 0655 8	PLASTIC SPACER
8 (M, MC)	SJS9331A	003 403 7236 7	AC OUTLET COVER
9	SMC1267	016 601 0648 2	SHIELD COVER
11	SHR301	016 645 0044 0	CLAMPER
12	SKL310	016 828 0332 8	FOOT
13	SHR6076	016 652 0868 7	PLASTIC SPACER
14	SMQ.ST33R-KM	016 652 0870 3	HOLDER ASSY
15	SMQ.ST33R-KM1	016 652 0869 6	HOLDER ASSY
16	SGXST33R-KM2	016 846 3913 9	CASSETTE LID
16-1	QBP2006A	015 727 0706 8	SPRING
17	SGU557	016 842 1683 2	FILTER
18 Ⓚ	SGU558	016 842 1682 3	FILTER
18 Ⓢ	SGU558-1	016 842 1713 3	FILTER
19 Ⓚ	SGYST55R-KM	016 840 8054 7	FRONT PANEL (K)
19 Ⓢ	SGYST55R-SM	016 840 8133 9	FRONT PANEL (S)
20 Ⓚ	SGX7916	016 846 3870 3	ORNAMENT
20 Ⓢ	SGX7916-1	016 846 3912 0	ORNAMENT
21 Ⓚ	SBC776	016 702 6300 1	BUTTON
21 Ⓢ	SBC776-1	016 702 6576 5	BUTTON
22	SMQ.40024	016 718 3408 6	EJECT LEVER
23	SMQ.40025	016 718 3409 5	EJECT LEVER
24	SGX7920	016 846 3868 7	ORNAMENT
25	SJN27	016 892 0132 2	TAPE COUNTER
26	SMN2050	016 632 1929 9	ANGLE
27	SMN2047	016 632 1938 8	ANGLE
28 Ⓚ	SBC951	016 702 7140 5	BUTTON
28 Ⓢ	SBC951-1	016 702 7139 8	BUTTON
29 Ⓚ	SBC953	016 702 7142 3	BUTTON
29 Ⓢ	SBC953-1	016 702 7218 0	BUTTON
30	SMN2048	016 632 1927 1	ANGLE
31	SMN2049	016 632 1939 7	ANGLE
32	SKL310	016 828 0332 8	FOOT
33 Ⓚ	SBCST55R-KM	016 702 7220 6	BUTTON
33 Ⓢ	SBCST55R-SM	016 702 7219 9	BUTTON
35 (E, EH, EG) (EK, XL, XA) (XB)	SGXST55R-KE	016 846 3907 7	CASSETTE LID
35 (M, MC, PA) (PE)	SGXST55R-KM	016 820 0641 8	CASSETTE LID
35 (E, EH, EG) (EK, XL, XA) (XB)	SGXST55R-SE	016 846 3908 6	CASSETTE LID
35 (M, MC)	SGXST55R-SM	016 820 0639 2	CASSETTE LID
36 (E, EH, EG) (EK, XL, XA) (XB)	SGXST55R-KE1	016 846 3909 5	CASSETTE LID
36 (M, MC, PA) (PE)	SGXST55R-KM1	016 820 0640 9	CASSETTE LID
36 (E, EH, EG) (EK, XL, XA) (XB)	SGXST55R-SE1	016 846 3910 2	CASSETTE LID
36 (M, MC)	SGXST55R-SM1	016 820 0638 3	CASSETTE LID
37 Ⓚ	SBN1228	016 700 2005 1	KNOB
37 Ⓢ	SBN1228-1	016 700 2006 0	KNOB
38 Ⓚ	SKC2100K99	016 800 3147 7	CABINET BODY
38 Ⓢ	SKC2100S98	016 800 3158 4	CABINET BODY
39	SJS501	003 403 7434 3	CONNECTOR
40	SJJ141-1	003 440 7804 8	JACK,SOCKET
41	SJF3057NK	003 410 8123 0	TERMINAL BOARD
42	SJJ134B	003 400 7050 0	JACK, HEADPHONES
43 ⚠ (M, MC)	SJS9331B	003 403 7275 0	AC OUTLET
44 ⚠ (M, MC, XL)	SJSD16	003 400 7436 6	AC INLET
44 ⚠ (E, EH, EG) (EK, XA, XB) (PA, PE)	SJS9236	003 403 4660 7	AC INLET
45	SJT3319	003 403 3892 7	CONNECTOR
45	SJT3415	003 403 3909 5	CONNECTOR(4-P)
45	SJT3511	003 403 3893 6	CONNECTOR(5-P)
45	SJT3809	003 410 6013 3	CONNECTOR
46	SJT30340LX-V	003 410 6075 9	CONNECTOR(3-P)
46	SJT30540LX-V	003 410 5996 1	CONNECTOR(5-P)
46	SJT30640LX-V	003 410 6149 8	CONNECTOR(6-P)
46	SJT30840LX-V	003 410 5998 9	CONNECTOR(8-P)
47 (E, EH, EG) (EK, XL, XA) (XB, PA, PE)	SMX888	016 600 0358 4	SHIELD PARTS
48 (XA, XB, PA) (PE)	SUW3079	016 650 5415 2	BRACKET, FOR V.ADJ
49	SUS862	016 726 1024 0	SPRING
50	SHE224	016 918 0635 5	PARTS KIT
51	LN068410P	001 033 0356 4	DIODE, GAASP
52	LN031408P	001 033 0355 5	DIODE, GAASP
SCREWS,WASHERS & NUTS			
71	XTB3+8JFZ	005 501 0138 3	SCREW
72	XTB3+16JFZ	005 501 1169 2	
73	XTB3+6FFZ	005 501 1590 3	SCREW
74	XNS9	005 507 0574 7	NUT
75	XTBS3+10JFR1	005 501 4861 7	TAPPING SCREW
76	XTB3+12JFZ	005 501 2078 0	SCREW
77	XTS3+8JFZ	005 501 2270 2	SCREW
78 Ⓢ	SNE2129	005 500 8058 5	SCREW
78 Ⓚ	SNE2129-1	005 500 7938 6	SCREW
79 Ⓢ	XTB3+8J	005 501 1535 0	SCREW
79 Ⓚ	XTB3+8JFZ	005 501 0138 3	SCREW
80 (XA)	XTB3+8JFZ	005 501 0138 3	SCREW
PACKINGS			
P1 (KM)	SPG5996	016 971 5179 7	CARTON BOX
P1 (KMC, KE, KEH) (KEG, KEK) (KXA)	SPG5997	016 971 5128 8	CARTON BOX
P1 (SE, SEH, SEG) (SEK, SXA)	SPG5998	016 971 5178 8	CARTON BOX
P1 (XL)	SPG5999	016 971 5177 9	CARTON BOX
P2 (KM, KMC, E) (EH, EG, EK) (XL, XA)	SPS4991	016 977 3347 7	PAD
P3 (KM, KMC, E) (EH, EG, EK) (XA)	SPS4992	016 977 3348 6	PAD
P3 (XL)	SPS4992-1	016 977 3349 5	PAD
P4	SPS4905	016 977 3274 7	PAD
P5 Ⓚ	SPP756	016 978 0540 5	PROTECTION COVER
P5 Ⓢ	XZB50X65B02	016 978 0420 2	PROTECTION COVER
ACCESSORIES			
A1 (E, EH, EK)	SQF12941	016 983 5331 1	INSTRUCTION BOOK
A1 (EG)	SQF12943	016 983 5396 4	INSTRUCTION BOOK
A1 (M)	SQF12944	016 983 5361 5	INSTRUCTION BOOK
A1 (MC)	SQF12945	016 983 5398 2	INSTRUCTION BOOK
A1 (XB)	SQF13044	016 983 5399 1	INSTRUCTION BOOK
A1 (PA, PE)	SQF13045	016 983 5400 5	INSTRUCTION BOOK
A1 (XL, XA)	SQF13067	016 983 5401 4	INSTRUCTION BOOK
A2 ⚠ (E, EH, EG)	SFDAC05E03	003 490 4809 5	POWER CORD
A2 ⚠ (EK)	SFDAC05G02	003 490 2613 3	POWER CORD
A2 ⚠ (XA, PA, PE)	SJA168-1	003 490 4122 9	POWER CORD
A2 ⚠ (MC)	SJA172	003 490 4069 7	POWER CORD
A2 ⚠ (M)	SJA172-1	003 490 4930 5	POWER CORD
A2 ⚠ (XL)	SJA173	003 490 4161 2	POWER CORD
A2 ⚠ (XB)	SJA183	003 490 4873 7	POWER CORD
A3 (M, MC)	SJP2257T	003 492 6803 3	CORD
A4 ⚠ (XA, XB, PA) (PE)	SJP9215	003 402 1437 9	AC PLUG ADAPTOR
A5	SJP2264	003 492 5035 3	OUTPUT CORD

Printed in Japan
H870611450 MY/IM/AM

ORDER NO. HAD8711310S0
A2

Service Manual

Supplement

Cassette Deck

dbx**/Dolby B-C NR, Auto-Reverse Double Cassette Deck

RS-T55R

Color

(K)...Black Type
(S)...Silver Type

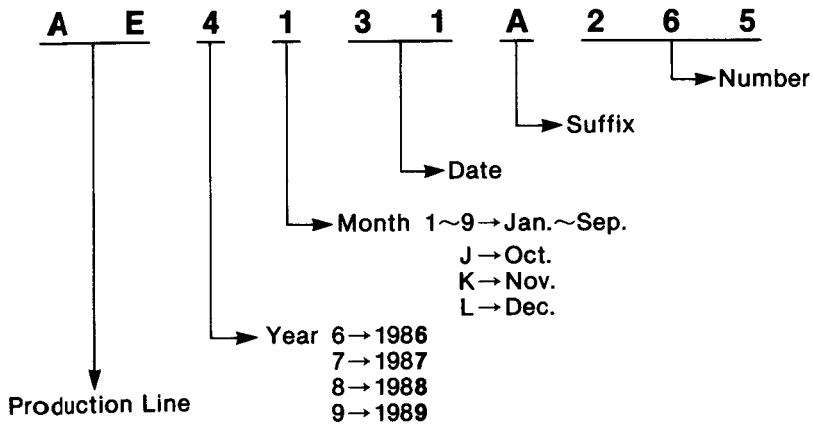
Color	Areas
(K)	[M] .....U.S.A.
(K) (S)	[MC]....Canada.
(K) (S)	[E] .....All European areas except United Kingdom.
(K) (S)	[EK].....United Kingdom.
(K) (S)	[EG].....F.R. Germany.
(K) (S)	[EH].....Holland.
(K) (S)	[XA].....Asia, Latin America, Middle Near East and Africa.
(K) (S)	[XL].....Australia.
(K) (S)	[XB].....Saudi Arabia.
(K)	[PA].....Far East PX.
(K)	[PE].....European Military.

DOLBY B•C NR*

Please file and use this supplement manual together with the service manual for Model No. RS-T55R, Order No. HAD8705141C0.

Note:
This supplement has been issued to inform you that the Microcomputer (Ref. No. IC901) has been changed in units having serial number suffixes "C" or later. (Refer to "How to read the serial number" shown below).

● How to read the serial number



* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.
** The term dbx is a registered trademark of dbx Inc.

Technics

Matsushita Services Company
50 Meadowland Parkway,
Secaucus, New Jersey 07094

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 De Infanteria, Km. 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

Panasonic Hawaii, Inc.
91-238, Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

Matsushita Electric of Canada Limited
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Centr[illegible] Osaka Japan

Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
6th Floor, world Trade Center Bldg.,
No. 4-1, Hamamatsucho 2-Chome,
Minato-ku, Tokyo 10[illegible] Japan

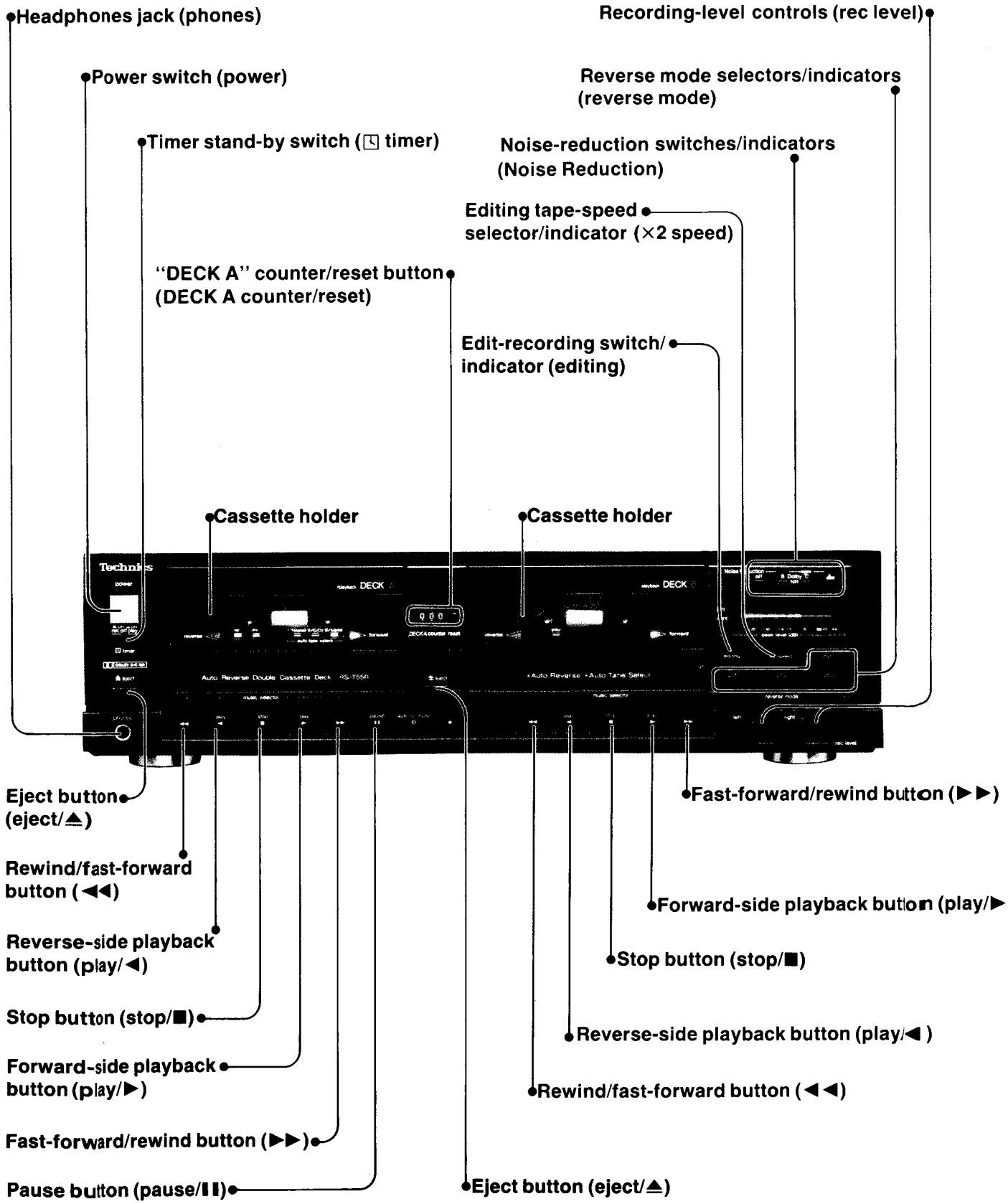
CHANGES

■ REPLACEMENT PARTS LIST

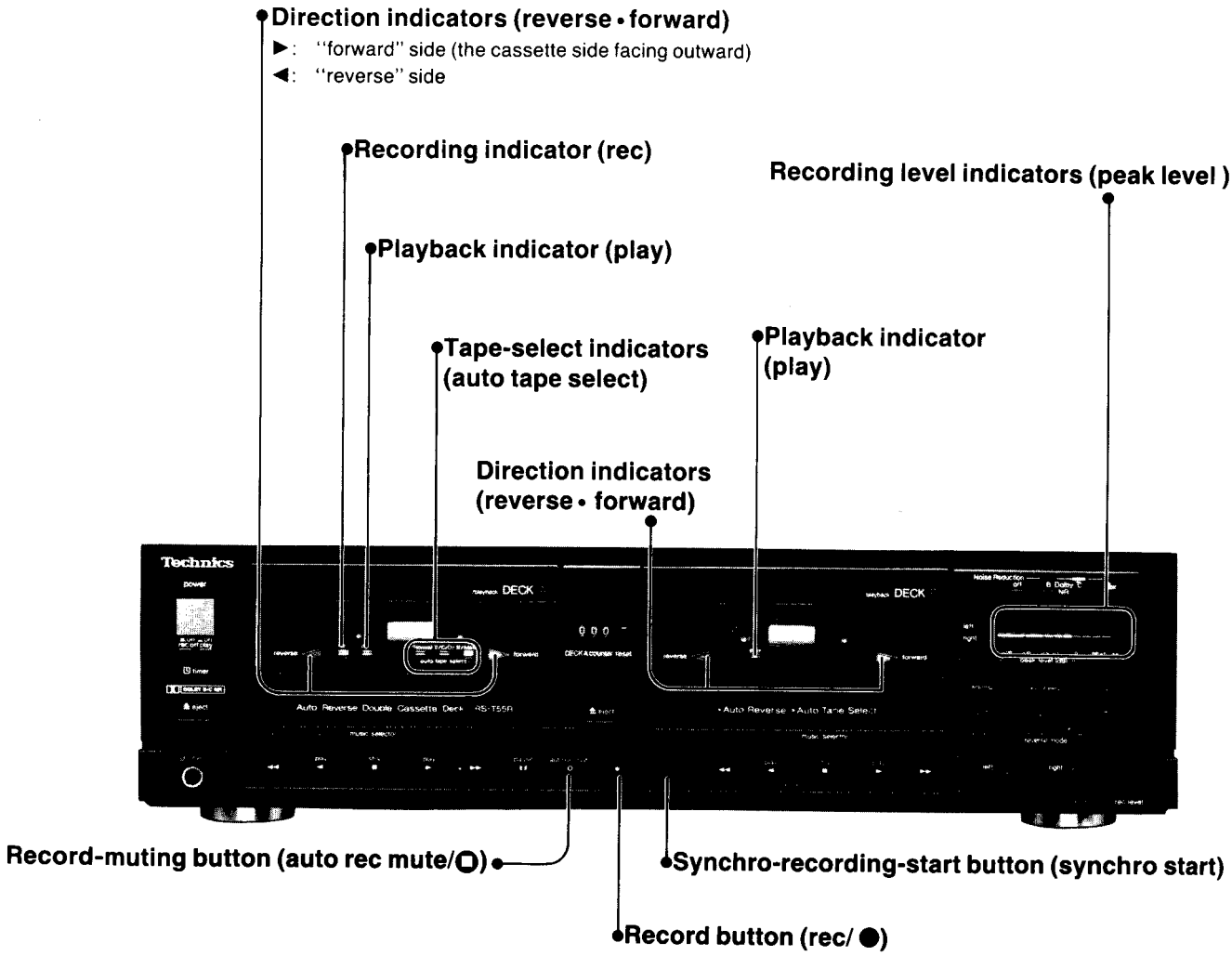
Notes: • Part numbers are indicated on most electrical parts. Please use this part number for parts order.
• Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Change of Parts No.		Part Name & Description	Remarks
	OLD	NEW		
RESISTORS				
R970	ERDS2TJ103	———	Carbon, 10kΩ, 1/4W	Deletion
R971	ERDS2TJ272	———	Carbon, 2.7kΩ, 1/4W	Deletion
R972	ERDS2TJ223	———	Carbon, 22kΩ, 1/4W	Deletion
R982	ERDS2TJ473	———	Carbon, 47kΩ, 1/4W	Deletion
R983	ERDS2TJ223	———	Carbon, 22kΩ, 1/4W	Deletion
R984, R985	ERDS2TJ472	———	Carbon, 4.7kΩ, 1/4W	Deletion
R990	ERDS2TJ223	———	Carbon, 22kΩ, 1/4W	Deletion
R991	ERDS2TJ103	———	Carbon, 10kΩ, 1/4W	Deletion
R992	ERDS2TJ272	———	Carbon, 2.7kΩ, 1/4W	Deletion
R993	ERDS2TJ101	———	Carbon, 100Ω, 1/4W	Deletion
CAPACITORS				
C970	ECEA1AU101	———	Electrolytic, 100μF, 10V	Deletion
C972	ECEA1AK220	———	Electrolytic, 22μF, 10V	Deletion
C973	ECKD1H103PF	———	Ceramic, 0.01μF, 50V	Deletion
C974	ECEA1CU101	———	Electrolytic, 100μF, 16V	Deletion
C507, C508	ECEA1CKS100	**ECEA1HK1R5**	Electrolytic, 1.5μF, 50V	Correction
C511, C512	ECEA1HK010	**ECEA1EK3R3**	Electrolytic, 3.3μF, 25V	Correction
C523, C524	ECQV1H124JZ	**ECQV1H184JZ**	Polyster, 0.18μF, 50V	Correction
C915	ECKD1H223PF [EG]	**ECKD1H333ZF**	Ceramic, 0.033μF, 50V	Correction
TRANSISTORS				
Q970, Q971	2SC3311A-Q	———	TRANSISTOR	Deletion
Q972	UN4111	———	TRANSISTOR	Deletion
Q979	2SC3311A-Q	———	TRANSISTOR	Deletion
Q980, Q981	UN4211	———	TRANSISTOR	Deletion
DIODES				
D970, D971	MA165	———	DIODE	Deletion
D975, D979	MA165	———	DIODE	Deletion
D980, D981	MA165	———	DIODE	Deletion
D982, D983	MA165	———	DIODE	Deletion
D984, D985	MA165	———	DIODE	Deletion
D986, D990	MA165	———	DIODE	Deletion
D992, D993	MA165	———	DIODE	Deletion
D997, D999	MA165	———	DIODE	Deletion
D999	MA165	———	DIODE	Deletion

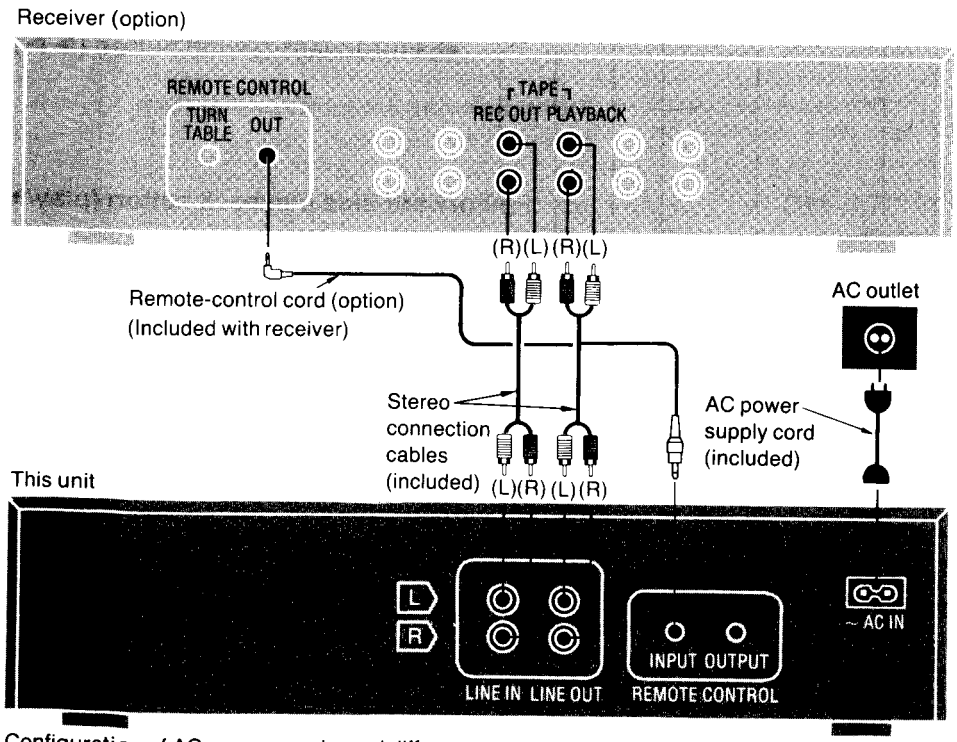
■ LOCATION OF CONTROLS



When using "DECK A" | **When using "DECK B"**



■ HOW TO CONNECTION



Configuration of AC power supply cord differs according to area.

■ Remote-control "INPUT" terminal

This terminal can be used only with Technics receivers or amplifiers having the appropriate remote-control terminal. (Contact your dealer for details.)

■ Remote-control "OUTPUT" terminal

This terminal can be used only with Technics graphic equalizer or compact disc players having the appropriate remote-control terminal. (Contact your dealer for details.)

Placement hints

If this unit is placed near a receiver, a "hum" noise may be heard during tape playback, recording, or AM reception of the receiver.
If this occurs, leave as much space as possible between the units, or place them where there is the least amount of "hum".

■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	How to remove the cabinet.
Procedure 1	• Remove the 7 screws.

Ref. No. 2	How to remove the main P.C.B.
Procedure 1 → 2	• Remove the 7 screws (❶ ~ ❼), and then remove the main P.C.B.

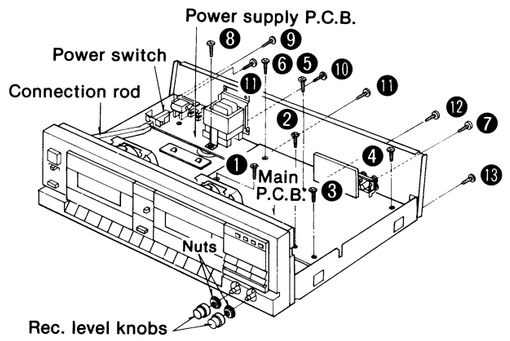


Fig. 1

Ref. No. 3	How to remove the power supply P.C.B.
Procedure 1 → 2 → 3	(Refer to the Fig. 1) • Pull out the connection rod from the power switch. • Remove the 6 screws (❽ ~ ⓭), and then remove the power supply P.C.B. and the rear panel together.

Ref. No. 4	How to remove the front panel.
Procedure 1 → 4	• Remove the 8 screws (❶ ~ ❽), and then remove the front panel.

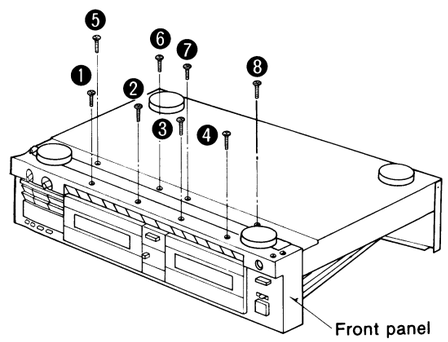


Fig. 2

Ref. No. 5	How to remove the mechanism units.
Procedure 1 → 4 → 5	• Remove the 6 screws (DECK Ⓐ: ❶ ~ ❸/DECK Ⓑ: ❹ ~ ❻). • Push the eject button. • Remove the counter belt (for the mechanism unit of DECK Ⓐ). • Remove the mechanism units (DECK Ⓐ/ DECK Ⓑ).

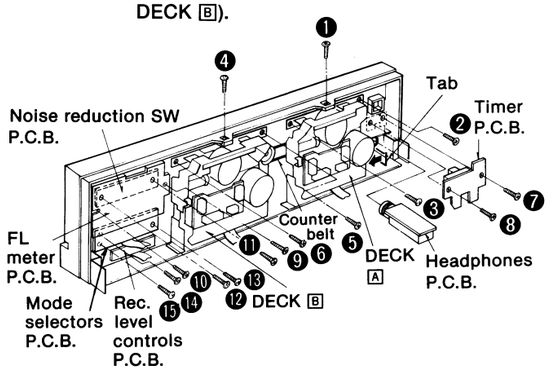


Fig. 3

Ref. No. 6	How to remove the printed circuit boards.
Procedure 1 → 4 → 6	(Refer to the Fig. 3) • Remove the 2 screws (❼, ❽), and then remove the timer P.C.B. • Push the tab aside, and then remove the headphones P.C.B. • Remove the 2 screws (❾, ❿), and then remove the FL meter P.C.B. • Remove the 2 screws (⓫, ⓬), and then remove the noise reduction SW P.C.B. • Remove the 3 screws (⓭ ~ ⓯), and then remove the mode selectors P.C.B. • Remove the 2 rec. level control knobs and the 2 nuts (refer to the Fig. 1), and then remove the rec. level controls P.C.B.

Ref. No. 7	How to remove the operation SW P.C.B.
Procedure 1 → 4 → 5 → 7	• Remove the 2 screws (DECK Ⓐ: ❶/DECK Ⓑ: ❷), and the remove the angles. • Remove the 8 screws (DECK Ⓐ: ❸ ~ ❻/DECK Ⓑ: ❼ ~ ❿), and then remove the operation SW P.C.B.s (DECK Ⓐ/DECK Ⓑ).

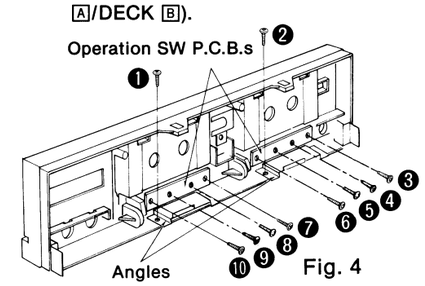


Fig. 4

Ref. No. 8	How to remove the LED P.C.B.
Procedure 8	• Remove the cassette lids (DECK Ⓐ and /or DECK Ⓑ). • Push the 3 tabs in the direction of the arrow, and then remove the LED P.C.B.s (DECK Ⓐ and/or DECK Ⓑ).

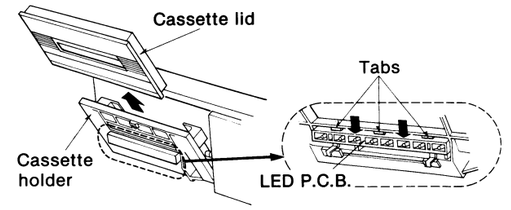
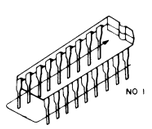
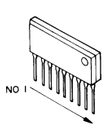


Fig. 5

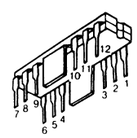
■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES



BA6146	16 Pin
TEA0665	28 Pin
AN7016K	30 Pin
LC6554H-3355	64 Pin
AN6294NK	28 Pin

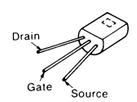


M5218L	8 Pin
MN6634	9 Pin

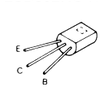


LB1648	12 Pin

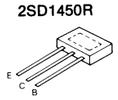
2SJ40CD
2SK381



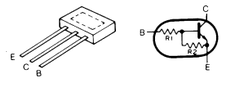
2SB621A-R
2SD592NC-R



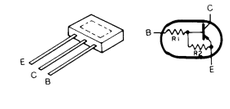
2SA1309AQS
2SC3311A-Q
2SD1450R



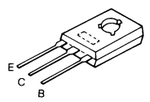
UN4211, UN4214



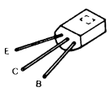
UN4111



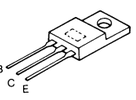
2SA885Q
2SC1846-R

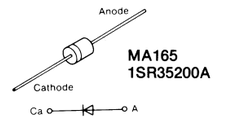


2SA1253-S

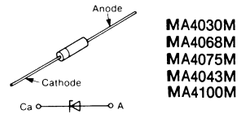


2SD1265-O
2SB941-P

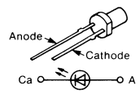




MA165
1SR35200A



MA4030M
MA4068M
MA4075M
MA4043M
MA4100M



LN363GCPP (GREEN)
LN463YCPPU (YEL)
LN863RCPP (RED)

■ MEASUREMENT AND ADJUSTMENT METHODES

Measurement Condition

- Recording level controls; Maximum
- Timer stand-by switch; Off
- Noise reduction switch; Off
- Editing switch; Off
- Edit-recording switch; Off
- Editing tape speed selector; Off
- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature 20±5°C(68±9°F)

Measuring instrument

- EVM(Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator
- ATT(Attenuator)
- DC voltmeter
- Resistor (600Ω)

Test tape

- Head azimuth adjustment (8kHz, -20dB); QZZCFM
- Tape speed adjustment (3kHz, -10dB); QZZCWAT
- Playback frequency response (315Hz, 12.5kHz, 10kHz, 8kHz, 4kHz, 1kHz, 250Hz, 125Hz, 63Hz, -20dB); QZZCFM
- Playback gain adjustment (315Hz, 0dB); QZZCFM
- Overall frequency response, Overall gain adjustment
  Normal reference blank tape;QZZCRA
  CrO_2 reference blank tape; QZZCRX
  Metal reference blank tape; QZZCRZ

HEAD AZIMUTH ADJUSTMENT (DECK A/B)

1.Playback the azimuth adjustment portion (8kHz, -20dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the outputs of the L-CH and R-CH are maximized and the lissajous waveform, as illustrated, approaches 0 degrees.

Note: If L-CH and R-CH are not maximized at the same point, adjust to the point where the levels of each channel are maximized and equal.

2.Perform the same adjustment in the reverse play mode.

forward and reverse rotation level difference check

3.Playback the gain adjustment portion (315Hz ,0 dB) of the test tape (QZZCFM), and then assure that the forward and reverse rotation level difference is within 1 dB.

4.After the adjustment, apply screwlock to the azimuth adjusting screw.

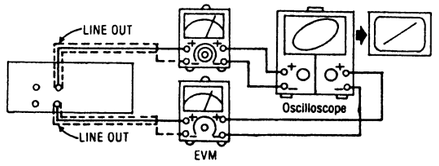
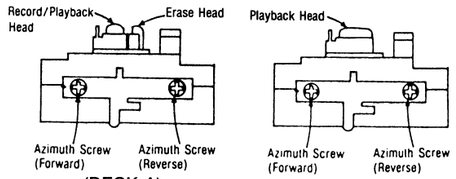


Fig. 1



(DECK A) (DECK B)

Fig. 2

TAPE SPEED ADJUSTMENT (DECK A/B)

High speed

1.Shift the editing tape speed switch to **"X2"** and ground **TP4**.

2.Playback the middle portion of the test tape (QZZCWAT).

3. Adjust Deck B=**VR802** and Deck A=**VR801 (see Fig. 14)** so that the output is within the standard value.

Normal speed

4.Shift the editing tape speed switch to **"X1"** and remove the ground from **TP4**.

5.Playback the middle portion of the test tape (QZZCWAT).

6. Adjust Deck B=**VR804** and Deck A=**VR803 (see Fig. 14)** so that the output is within the standard value.

Note: The High speed adjustment must be done before the Normal speed adjustment.

Standard value: 3000 ± 15Hz(Normal), 6000 ± 30Hz(High)

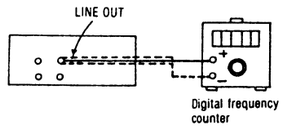


Fig. 3

PLAYBACK GAIN ADJUSTMENT (DECK A/B)

1.Playback the gain adjustment portion (315 Hz, 0 dB) of the testtape (QZZCFM).

2. Adjust Deck B=**VR3** (L-CH) [[**VR4** (R-CH)]] and Deck A=**VR5** (L-CH) [[**VR6** (R-CH)]] so that the output is within the standard value.

Standard value: 0.4V±0.5dB

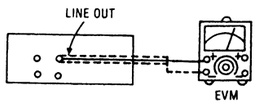


Fig. 4

PLAYBACK FREQUENCY RESPONSE (DECK A/B)

1.Playback the frequency response portion (315 Hz, 12.5 kHz ~ 63 Hz, -20 dB) of the test tape (QZZCFM).

2.Assure that the frequency response is within the range shown in **Fig. 6** for both L-CH and R-CH.

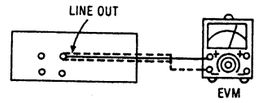


Fig. 5

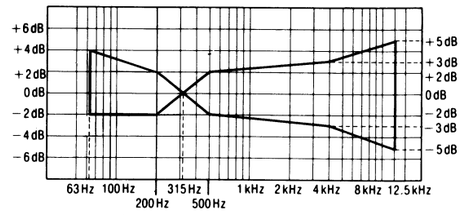


Fig. 6

ERASE CURRENT ADJUSTMENT (DECK A)

1.Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record Pause mode.

2.Adjust **VR301** so that the output between **TP1** and GND is within the standard value.

Standard value: 170±5mA(Metal), (170±5mV)

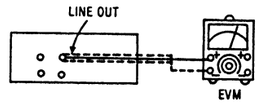


Fig. 7

OVERALL FREQUENCY RESPONSE (DECK A)

1.Insert the Normal blank test tape (QZZCRA) and set the unit to the Record Pause mode.

2.Apply a reference input signal (1 kHz, -24 dB) through an attenuator.

3.Attenuate the signal by 20 dB and adjust the frequency from 50 Hz ~ 10 kHz .

4.Record the frequency sweep.

5.Playback the recorded signal and assure that it is within the range shown in **Fig. 9** in comparison to the reference frequency (1 kHz).

6.If it is not within the standard range, adjust **VR1** (L-CH) and **VR2** (R-CH) so that the frequency level is within the standard range.

- Level up in high frequency range.....Increase the bias current.
- Level down in high frequency range...Decrease the bias current.

7.Repeat steps 2 ~ 6 above using the CrO_2 tape(QZZCRX) and the Metal tape(QZZCRZ) increasing the frequency range to 12kHz (50 Hz ~ 12.5 kHz).

8.Assure that the level is within the range shown in **Fig. 10**.

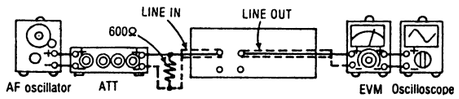


Fig. 8

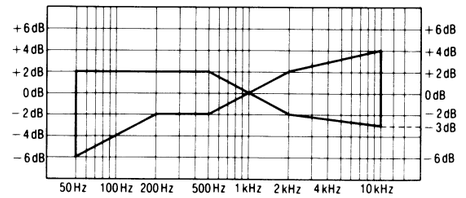


Fig. 9

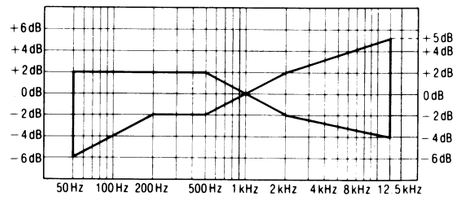


Fig. 10

OVERALL GAIN ADJUSTMENT (DECK A)

1.Insert the normal blank test tape (QZZCRA) and set the unit to the Record pause mode.

2.Apply a reference input signal (1 kHz, -24 dB). Attenuare the output so that its level becomes 0.4V.

3.Record this input signal.

4.Playback the signal recorded in step 3 above, and assure that the output is within the standard value.

5.If it is not within the standard, adjust **VR7** (L-CH) and **VR8** (R-CH).

6.Repeat the 2 ~ 5 above until the output is within the standard value.

Standard value: 0.4V ± 0.5dB

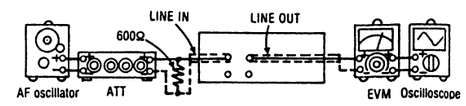


Fig. 11

FLUORESCENT METER LEVEL ADJUSTMENT

1. Insert the Normal blank test tape(QZZCRA) and apply a reference input signal (1 kHZ, -24 dB) in the Record Pause mode.
2. Adjust the output to 0.4V by attenuator.
3. Adjust **VR9** (L-CH) and **VR10** (R-CH) so that the 0 dB segment part is half lighted.

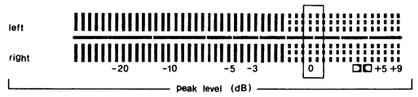


Fig. 12

dbx TIMING ADJUSTMENT

1. Shift the noise reduction switch to the dbx position.
2. Playback the gain adjustment portion (315 Hz, 0 dB) of the test tape (QZZCFM).
3. Connect a DC voltmeter across **TP501** and **TP502**.
4. Adjust **VR501** so that the output is within the standard value.

Standard value: DC16.6mV ± 0.5mV

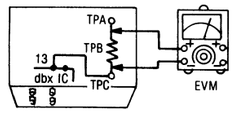


Fig. 13

TPA: TP501, TPB: R521, TPC: TP502

• Adjustment point

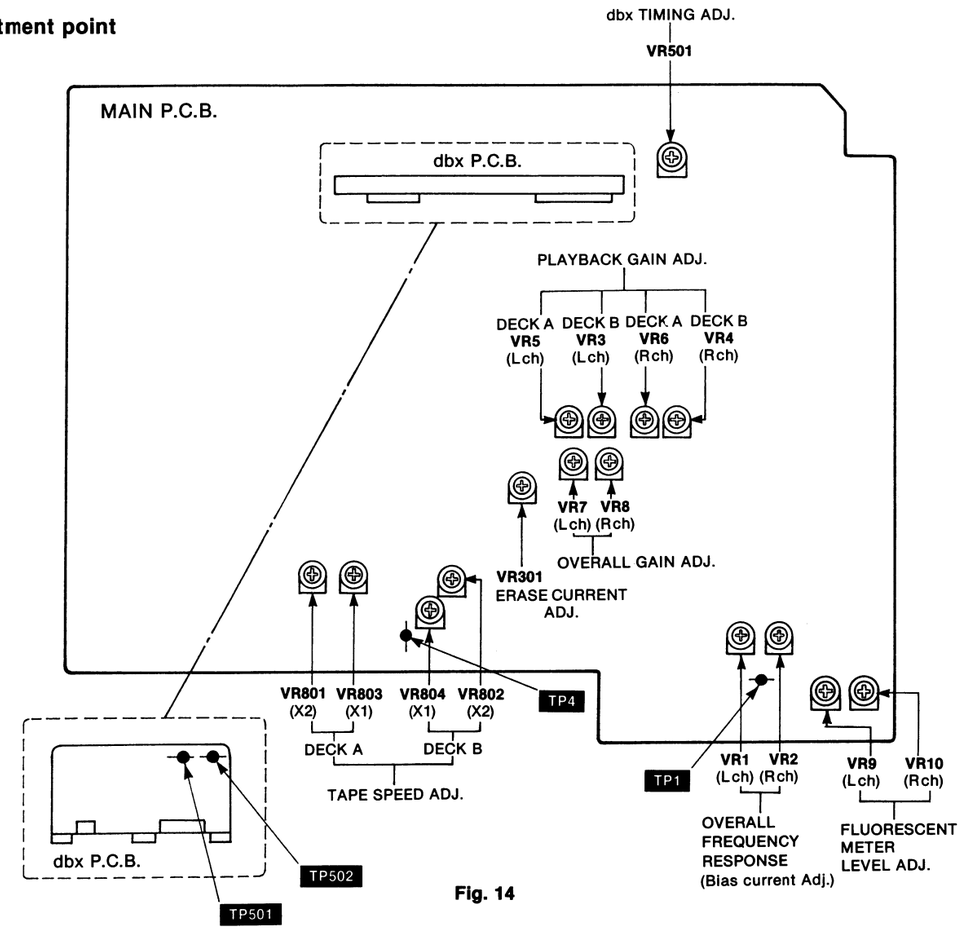
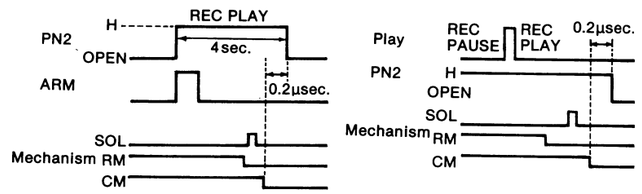


Fig. 14

■ MICROCOMPUTER TERMINAL FUNCTION AND WAVEFORM (IC901: LC6554H-3355)

Terminal	Symbol	Function/operation
1	PN0	LINE OUT output mute control (OPEN in Line Out Mute mode)
2	PN1	Meter mute control • When Auto Rec Mute switch (S713) is pressed in REC PAUSE mode, "L" → "OPEN", and "OPEN" → "L" when released. • "OPEN" during Auto Rec Mute in REC PLAY mode. • "OPEN" in STOP mode, and "L" in PLAY mode.
3	PN2	Rec amp mute control • "L" when not in Auto Rec Mute mode. • "OPEN" in other mode. (Timing Chart)
4	PN3	Dolby IC Encode/decode selection. • "H" in non-editing REC mode. • "L" in other mode.
5	P00	Playback time constant selection • "H" in normal tape play mode. • "L" in CrO_2, metal tape play mode. • Previous condition is maintained in other mode.
6	P01	Playback amp input selection • "H" in DECK [A] playback mode. • "L" in other mode.

Editing SW / DECK [A]	DECK [B] STOP, FF, REW PAUSE, MS SEARCH ON	DECK [B] STOP, FF, REW PAUSE, MS SEARCH OFF	PLAY ON	PLAY OFF
STOP, FF, REW, PAUSE	OPEN	OPEN	H	H
PLAY	H	H		
REC PAUSE	OPEN	H	H	H
REC PLAY	OPEN	H	H	H

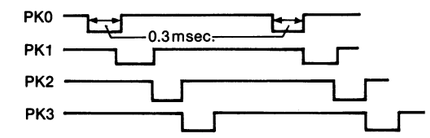


DECK [B]	DECK [A]	DECK [B] DECK [A] STOP, FF REW, PAUSE	DECK [B] PLAY	DECK [A] PLAY	Edit mode DECK [B] PLAY	Edit mode DECK [A] PLAY	Edit mode DECK [A] REC PLAY or REC PAUSE	Edit mode DECK [B] PLAY	Edit mode DECK [A] REC, PLAY or REC, PAUSE
NORMAL	NORMAL	—	H	H	H	H	—	H	
NORMAL	CrO_2 METAL	—	H	OPEN	H	OPEN	—	H	
CrO_2 METAL	NORMAL	—	OPEN	H	OPEN	H	—	OPEN	
CrO_2 METAL	CrO_2 METAL	—	OPEN	OPEN	OPEN	OPEN	—	OPEN	

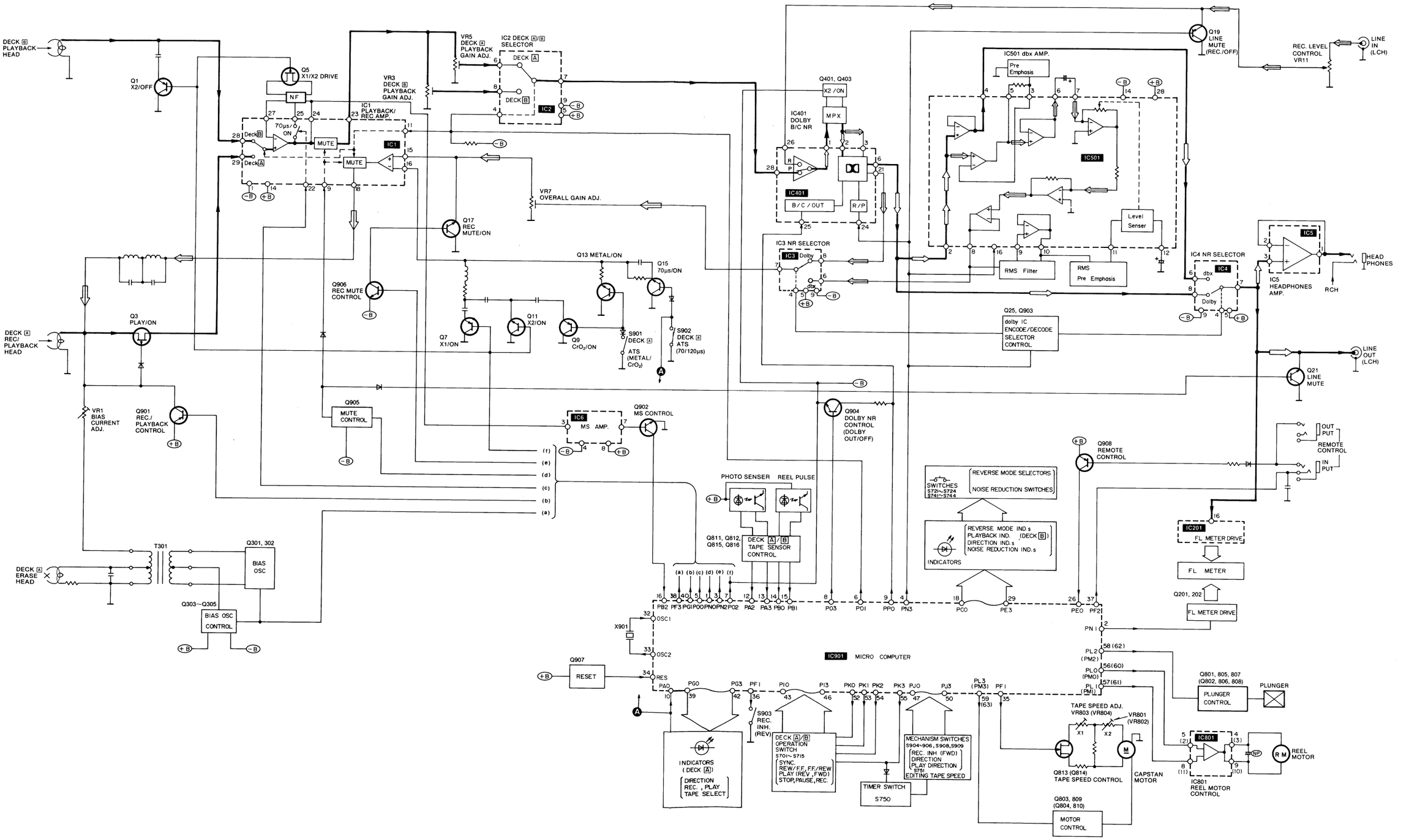
Terminal	Symbol	Function/operation
7	P02	X2 display output • "H" with X2 editing display LED ON.
8	P03	NR OFF selector • "H" in NR selector "OFF" mode.
9	PP0	Dolby C selector • "H" in Dolby C selector mode.
10	PA0	DECK [A] Auto tape selector input • "L" with normal tape loaded.
11	PA1	DECK [B] Auto tape selector input • "L" with normal tape loaded.
12	PA2	DECK [B] Leader tape detection • Usually "H".
13	PA3	DECK [A] Leader tape detection • "L" in leader tape play mode.
14	PB0	DECK [B] Reel base rotation detection Pulse is input when reel base rotates.
15	PB1	DECK [A] Reel base rotation detection Pulse is input when reel base rotates.
16	PB2	Music selector pulse input • "L" when music selector is operated with signal applied, and "H" without signal.
17	PB3	Power supply OFF detection • When power supply ON, pulse-form waveform as shown below is input. 
18	PC0	dbx display output • "L" with dbx display LED ON.
19	PC1	Dolby B display output • "L" with Dolby B display LED ON.
20	PC2	Dolby C display output • "L" with Dolby C display LED ON.
21	PC3	Editing display output • "L" with editing display LED ON.

Terminal	Symbol	Function/operation
22	PD0	⇔ (SERIES) display output • "L" with ⇔ (SERIES) display LED ON.
23	PD1	⇄ (ONE WAY) display output • "L" with ⇄ (ONE WAY) display LED ON.
24	PD2	⮌ (REVERSE) display output • "L" with ⮌ (REVERSE) display LED ON.
25	PD3	⮌ (REPEAT) display output • "L" with ⮌ (REPEAT) display LED ON.
26	PE0	Remote control serial signal input • Terminal to input KEY-IN signal from Amp, Receiver, Remote Control.
27	PE1	DECK [B] Playback display output • "L" in play mode • "H" → "L" → "H" ..... repeated in music selector mode.
28	PE2	DECK [B] Direction display output • "H" with FORWARD LED ON. • "L" with REVERSE LED ON.
29	PE3	DECK [B] Remote control display output • "L" with power supply ON. • "H" with initial signal from remote control received. • "H" or "L" with DECK [A] or DECK [B] of remote control commander selected.
30	TEST	GND
31	V_{SS}	GND
32	OSC1	Clock oscillation terminal • Oscillation terminal, but microcomputer does not operate with probe connected.
33	OSC2	Clock oscillation terminal
34	$\overline{RES}$	Reset terminal • Microcomputer reset ..... usually "H"
35	PF0	Tape speed control • "L" during X2 tape travel.
36	PF1	DECK [A] REVERSE and REC INHIBIT INPUT • "L" when rec possible on reverse rotation side. • "H" when rec impossible. (Detected by tape erase preventing lug)
37	PF2	Direct operation inhibit output • "H" in REC PAUSE and REC PLAY mode.

Terminal	Symbol	Function/operation
38	PF3	DECK Ⓐ Bias oscillation control • "L" in REC PLAY mode.
39	PG0	DECK Ⓐ Direction display output • "H" with FORWARD LED ON. • "L" with REVERSE LED ON.
40	PG1	DECK Ⓐ REC display output • "L" in REC PAUSE and REC PLAY mode.
41	PG2	DECK Ⓐ Playback display output • "L" in PLAYBACK mode. • "H" → "L" → "H" → "L" ..... repeated in PAUSE mode. • "H" → "L" → "H" → "L" ..... quickly repeated in music selector mode.
42	PG3	DECK Ⓐ Remote Control display output • "L" in Power ON mode. • "H" when DECK Ⓑ is selected by DECK Ⓐ/DECK Ⓑ of remote control commander.
43	PI0	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK Ⓐ FOR PLAY (S707), STOP (S709) and DECK Ⓑ FOR PLAY (S708), STOP (S710).)
44	PI1	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK Ⓐ REV PLAY (S705), DECK Ⓑ REV PLAY (S706) and SYNCHRO START (S712).)
45	PI2	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK Ⓐ FF (S703), PAUSE (S711), REC (S715) and DECK Ⓑ FF (S704).)
46	PI3	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK Ⓐ REW (S701), auto Rec Mute (S713) and DECK Ⓑ REW (S702).)
47	PJ0	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK Ⓐ FOR REC INHIBIT and X1/X2 SELECTOR SW (S731).)
48	PJ1	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK Ⓐ PLAY SW (Head base plate position detection) and DECK Ⓑ PLAY SW.)

Terminal	Symbol	Function/operation
49	PJ2	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK Ⓐ/Ⓑ DIRECTION SW (MECHANISM SW), EDITING (S732) and TIMER SW (PLAY).)
50	PJ3	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to TIMER SW (REC).)
51	V_P	NO CONNECTION
52	PK0	Input SW scan 
53	PK1	
54	PK2	
55	PK3	
56	PL0	DECK Ⓐ Reel motor control (Forward direction) • "H" in FORWARD PLAY and FF mode.
57	PL1	DECK Ⓐ Reel motor control (Reverse direction) • "H" in REVERSE PLAY and REW mode.
58	PL2	DECK Ⓐ Plunger control • "H" for a short time when mechanism mode is shifted.
59	PL3	DECK Ⓐ Capstan motor control • "H" in PLAY and REC PLAY mode.
60	PM0	DECK Ⓑ Reel motor control (Forward direction) • "H" in FORWARD PLAY and FF mode.
61	PM1	DECK Ⓑ Reel motor control (Reverse direction) • "H" in REVERSE PLAY and REW mode.
62	PM2	DECK Ⓑ Plunger control • "H" for a short time when mechanism mode is shifted.
63	PM3	DECK Ⓑ Capstan motor control • "H" in PLAY mode.
64	V_{DD}	Operates with +4.5V to +5.5V.

■ BLOCK DIAGRAM



NOTES:

(➡): Playback signal

(⇨): Recording signal

ORDER NO. HAD8801001P0

Parts Change Notice

Model No. RS-T55R [M, MC, E, EK, EG, EH, XA, XL, XB, PA, PE]

Please revise the original parts list in the Service Manual to conform to the change (s) shown below. If new part numbers are shown, be sure to use them when ordering parts.

Reason for Change *The circled item indicates the reason. If no marking, see the Notes in the bottom column.

1. Improve performance	
2. Change of material or dimension	
3. To meet approved specification	
4. Standardization	
5. Addition	
(6.) Deletion	
7. Correction	
8. Other	

Interchangeability Code **The circled item Indicates the interchangeability. If no marking, see the Notes in the bottom column.

	Parts	Unit Production	
A	Original	Early	Original or new parts may be used in either early or late production units. Use original parts until the supply is exhausted, then stock new parts.
	New	Late	
B	Original	Early	Original parts may be used in early production units only. New parts may be used in either late production units. Use original parts where possible, then stock new parts.
	New	Late	
C	Original	Early	New parts are to be used in both early and late production units. Stock new parts only.
	New	Late	
D	Original	Early	Original parts must be used in early production units. New parts must be used in late production units only. Stock both original and new parts.
	New	Late	
(E)	Other		Deletion

Part Number Information

Model No.	Ref. No.	Original Part No.	New Part No.	Notes(*,**)	Part Name & Description	Q'ty
CASSETTE DECK						
RS-T55R	134	SMQA1106	Deletion	6, E	TAPE B	0

Please file this parts change notice with your copy of the Service Manual for model No. RS-T55R, Order No. HAD8705141C0.

Technics

Matsushita Services Company
50 Meadowland Parkway,
Secaucus, New Jersey 07094

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 De Infanteria. Km.9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

Panasonic Hawaii Inc.
91-238 Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

Matsushita Electric of Canada Limited
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
6th Floor, World Trade Center Bldg.,
No. 4-1, Hamamatsu-cho 2-Chome, Minato-ku,
Tokyo 105, Japan

Printed in Japan
K8C0100310IM

ORDER NO. HAD8802052S0
A2

Service Manual

Supplement-II

dbx**/Dolby B-C NR, Auto-Reverse Double Cassette Deck

Cassette Deck

RS-T55R

DOLBY B•C NR

Please file and use this supplement manual together with the service manual for Model No. RS-T55R, Order No. HAD8705141C0/.

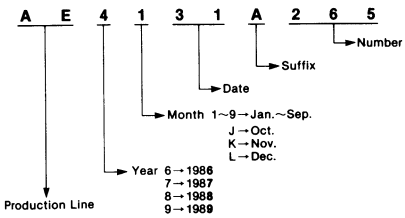
Color

(K)...Black Type
(S)...Silver Type

Color	Areas
(K)	[M] .....U.S.A.
(K) (S)	[MC]....Canada.
(K) (S)	[E] .....All European areas except United Kingdom.
(K) (S)	[EK].....United Kingdom.
(K) (S)	[EG].....F.R. Germany.
(K) (S)	[EH].....Holland.
(K) (S)	[XA].....Asia, Latin America, Middle Near East and Africa.
(K) (S)	[XL].....Australia.
(K) (S)	[XB].....Saudi Arabia.
(K)	[PA].....Far East PX.
(K)	[PE].....European Military.

Note:

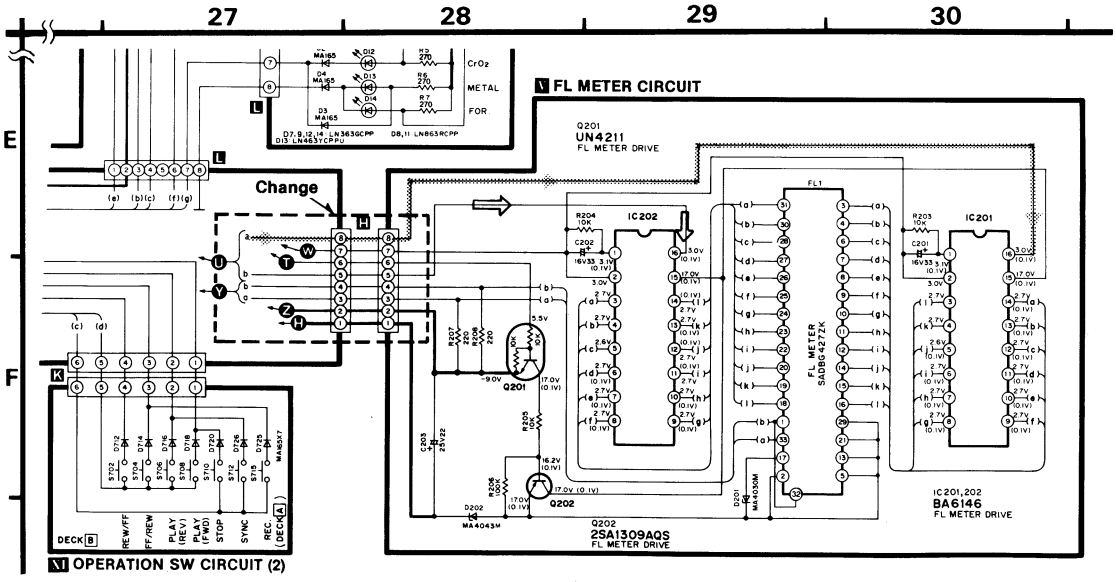
- This supplement has been issued to inform you that the FL meter P.C.B. has been changed in units having serial number suffixes "C" or later.
  (Refer to "How to read the serial number" shown below).
- **How to read the serial number**



- The FL meter P.C.B. was changed to improve meter accuracy.
- The jumper on the back of the P.C.B. have been discontinued. The connector [H] has been changed from a 7-pin to an 8-pin connector.

CHANGES

■ SCHEMATIC DIAGRAM



* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.
** The term dbx is a registered trademark of dbx Inc.

Technics

Matsushita Services Company
50 Meadowland Parkway,
Secaucus, New Jersey 07094

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 De Infanteria, Km. 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

Panasonic Hawaii, Inc.
91-238, Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

Matsushita Electric of Canada Limited
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3

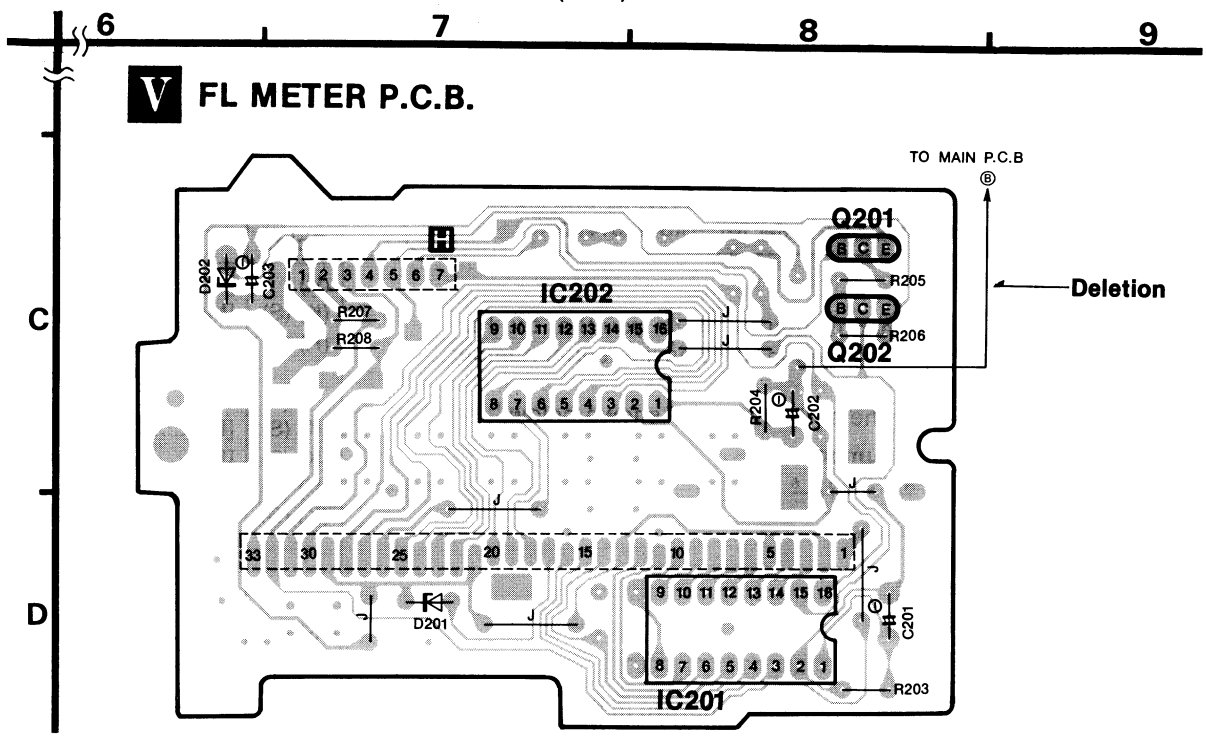
Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
6th Floor, world Trade Center Bldg.,
No. 4-1, Hamamatsu-cho 2-Chome,
Minato-ku, Tokyo 105, Japan

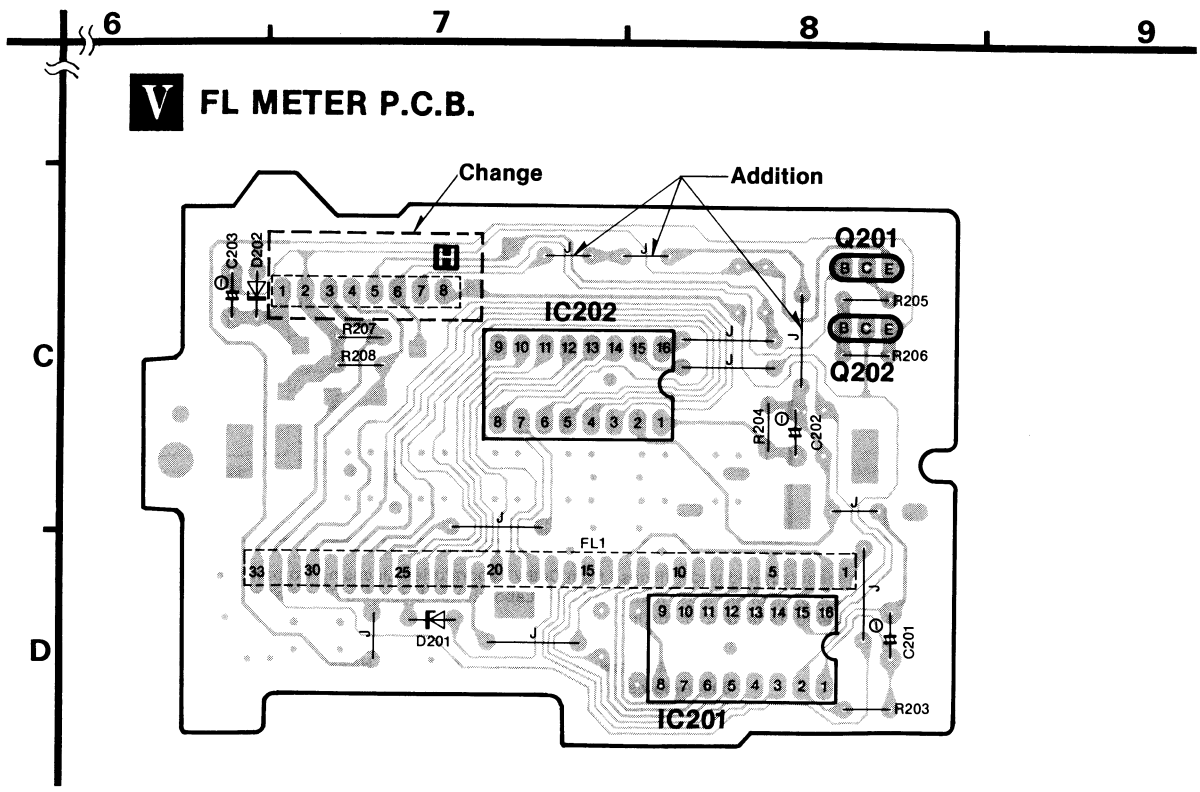
■ PRINTED CIRCUIT BOARD

Note: • The jumper on the back of the P.C.B. have been discontinued.
The connector [H] has been changed from a 7-pin to an 8-pin connector.

(OLD)



(NEW)



Printed in Japan
H880211700 YY/MY